

BOSTON PUBLIC LIBRARY



3 9999 06316 858 5



6351.

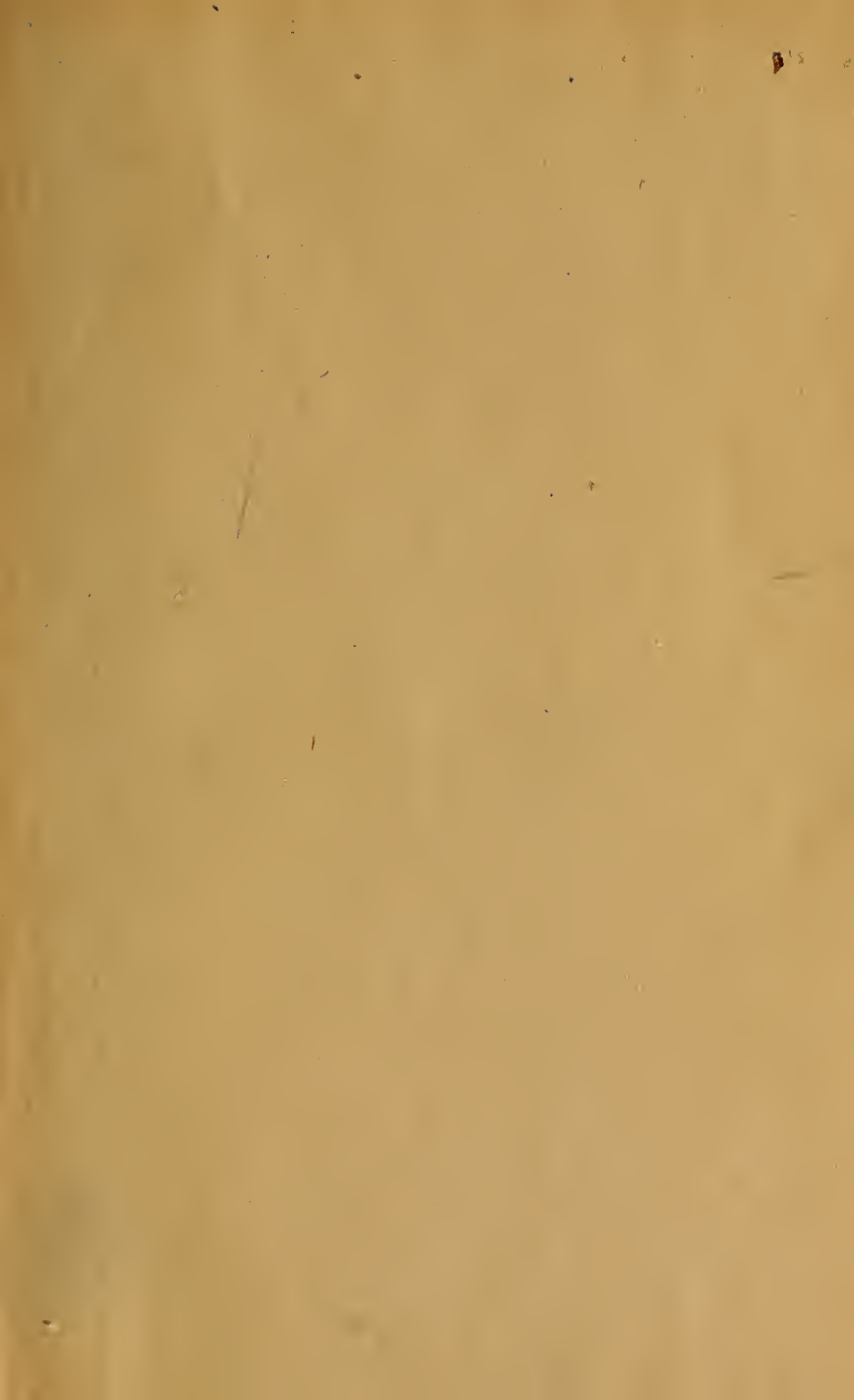
8

1920

No. 6351.8

1920





ANNUAL REPORT
OF THE
FIRE DEPARTMENT
AND WIRE DIVISION

OF THE
CITY OF BOSTON

FOR THE
YEAR ENDING 31 JANUARY, 1920



CITY OF BOSTON
PRINTING DEPARTMENT
1920

ANNUAL REPORT
OF THE
FIRE DEPARTMENT
AND WIRE DIVISION

OF THE
CITY OF BOSTON

FOR THE
YEAR ENDING 31 JANUARY, 1920



CITY OF BOSTON
PRINTING DEPARTMENT
1920
d

RECEIVED
JAN 23
1904

ANNUAL REPORT
OF THE
FIRE DEPARTMENT
FOR THE YEAR 1919-20.

BOSTON, February 1, 1920.

HON. ANDREW J. PETERS,

Mayor of the City of Boston:

SIR,— In accordance with section 24, chapter 3, Revised Ordinances of 1914, City of Boston, I submit herewith the annual report of the Fire Department for the year ending January 31, 1920.

FINANCES.

The total amount spent in maintaining the department during the year was \$2,864,040.07. The increased cost this year over last year was because of the extra expenditure made necessary by the Wire Division which became part of the Fire Department June 10, 1919, increases in the number and salaries of employees, and the increased cost of supplies.

ALTERATIONS TO HOUSES.— PERMANENT IMPROVEMENTS.

The following permanent improvements have been made in the houses of the department:

Ladder 1.— New reinforced concrete floor of fire-proof construction throughout. New heating apparatus, water-closet, sink and new floor drainage. A gasoline separator between floor drains and sewer was installed

outside of building, the practice of installing separators inside of buildings having been condemned. New skylights with greater ventilating spaces placed in roof above the dormitory.

Headquarters.—Rooms for Fire Prevention Bureau, Officers' School and Wire Division were constructed in second and third story. All of this new work was of fireproof construction.

Office of Chief of Department, Mason Street.—A second story was added to the existing one-story building on Mason street for use as sleeping quarters by the Chief of Department. The sleeping quarters formerly used by chiefs at this house were not suitable, being small, poorly ventilated and unsanitary.

Ladder 17.—A new window, with casement sash, was placed in the brick side wall of this building, adding materially to the ventilating of the company's dormitory.

Engine 50.—The presence of gas and dead air in the basement of the newly constructed quarters of Engine Company 50 made it necessary to reconstruct the chimney and ventilate the cellar.

Wareham Street Garage.—An old unused building on Wareham street was rebuilt as a garage. The first story has been fireproofed by the installation of a concrete floor and walls of cement on wire lath. The floor of the second story was levelled and new supports added, partitions were placed in position to afford large rooms for the officers and automobile schools as well as for storage purposes. A cellar was built, new plumbing and heating plant installed.

Engine 48.—The high banking on the left side of quarters occupied by Engine Company 48 was slipping and endangering the foundations of the abutter's residence. A concrete retaining wall was erected, to correct this condition, approximately 10 feet over all in maximum height and 60 feet long.

Engine 7.—The quarters of Engine Company 7, East street, were inspected and sketches made. A recommendation was made that an appropriation of \$40,000 be made for a new house. The present house cannot be repaired to advantage.

Engine 19.—The twin towers on the building occupied by Engine Company 19 have been complained of for years as being unsafe and dangerous. The towers were taken down and re-roofed at the level of main roof.

The brick work in the front wall was repointed and cracks removed. The outside of the building will be in good condition for many years to come.

Fire Alarm Plans.—All plans for fire alarm boxes, underground conduit work and connections have been prepared within the department.

RECONSTRUCTION OF STATIONS.

Recommendations have been made for new fire stations or the rebuilding of the present stations at the following locations:

Engine 31 (Fireboat).—The quarters of this company were destroyed in the molasses disaster in January, 1919, and a new station is needed.

Engine 7, East street, Ward 5.—Forty thousand dollars is necessary to put the building occupied by Engine Company 7 in proper condition. Since making this original estimate prices have advanced, and at least from \$5,000 to \$10,000 extra, or even more, will probably be required.

Engine 21, Columbia road, Ward 11.—Approximately \$25,000 is necessary to remodel this building. Owing to increases in the cost of materials and labor this estimate may be increased 20 per cent.

Engine 19, Norfolk street, Ward 21.—The department has taken down the towers on the quarters of Engine Company 19 and has made the front wall safe at a cost of approximately \$1,500. An additional \$3,500 would probably cover the cost of installing a concrete floor in this house and make it suitable for motor fire apparatus.

Engine 20 and Ladder 27, Walnut street, Ward 20.—To put the station occupied by these two companies in good repair approximately \$7,500 should be appropriated.

Engine 28 and Ladder 10, Centre street, Ward 22.—This station, in view of the fact that it is to be motorized and is a very old house should be remodeled. It can be done at an estimated cost of approximately \$20,000 to \$25,000.

Engine 17 and Ladder 7, Meeting House Hill.—These two separate fire stations, one of which is very obsolete, should be remodeled and rebuilt, and one house sufficiently large should be provided to accommodate both companies. This can be done at an estimated cost of approximately \$35,000. The ladder company's house is absolutely unfit for use as a fire station at the present time.

FIRE-FIGHTING FORCE.

There are 1,382 employees in the Fire Department, of whom 1,034 are privates and 172 are officers in the uniform force.

The balance, 176 employees, are in the various divisions of the department, namely, Headquarters, Bureau of Supplies and Repairs, Fire Alarm Branch, Wire Division and Veterinary Hospital.

MOTOR APPARATUS.

There has been more new motor apparatus purchased, placed in service and in reserve this year than during any previous year in the history of the department.

On February 1, 1919, there were seventy-six pieces of motor fire apparatus in service and in reserve. On February 1, 1920, there were ninety-seven pieces of motor fire apparatus in service and in reserve.

Combination automobile motor pumpers and hose cars, of 1,000 gallons capacity, have been placed in service, and more will be installed in the future.

IMPROVEMENTS AND CHANGES.

The efficiency of the department has been improved by the changes made in the organization and personnel of the force. Among the improvements made are the following:

The system of accounting in the department is being reorganized by a certified public accountant.

A small fireproof building has been erected in the Fire Department yard for the purpose of demonstrating the effect of ventilation of buildings on fire. This building is used in connection with the Fire Department Drill School.

Changes have been made in the traffic regulations in the congested sections of the city through suggestions from the Fire Commissioner. The result is that fire apparatus has been able to respond to fires with more celerity than formerly.

The department has been divided into three divisions, each in charge of a deputy chief. Heretofore there were only two divisions, and the territory in each division was too much for one man to cover.

The work of the drill school has been extended. In addition to the drilling and instruction of newly appointed members in their duties as firemen, the drill

master of the department has charge of an annual inspection of the various companies. Each company of the department reports at least once each year to the headquarters and is inspected in the duties of firemen by the drill master. One such general inspection has already been effected. It commenced on October 27, 1919, and concluded December 27, 1919.

An automobile school for instruction in the care, mechanism and operation of motor fire apparatus for officers and men of the department was established and opened on September 2, 1919. All officers of the department will be obliged to attend this school.

An officers' school has been established in the department for the study and discussion of fire service problems including fire fighting and fire prevention. This school opened September 2, 1919. Courses of lectures are given on the water system, fire alarm system, care of motor apparatus, laws, ordinances, fire prevention regulations, marine fires, handling of fire streams, building inspection, tools and appliances, fire fighting in mercantile and manufacturing buildings in the high value district, apartment and tenement house fires, sprinklers and other methods of private fire protection, explosives, acids, etc., administration and discipline. The lectures on these topics are given to the various classes by authorities on the subjects, such as Mr. Frank A. McInnes, Division Engineer of the Water Division, Public Works Department, Mr. Walter L. Wedger, State Chemist, Prof. Charles E. Stewart and officers of the Boston Fire Department. The first term of the school will conclude about July 1, 1920.

The Fire Prevention Bureau of the department was reorganized October 6, 1919, for the purpose of complying with the provisions of chapter 795, Acts of 1914 (Fire Prevention Law). A corps of firemen attached to the bureau are inspecting all premises in the city for fire hazards and are having dangerous conditions remedied.

The results of the work of the fire prevention inspectors have been very satisfactory due to the faithfulness with which they have performed their duty and the hearty co-operation that they have received from owners of property which has been inspected.

Standard specifications for the purchase of fire hose have been adopted so that it is now possible to purchase hose under specifications after public advertising.

Ninety-one members of the department are to be sent to the Franklin Union Automobile School for instruction in the operation and care of automobiles. This is in addition to the Automobile School established in the Fire Department and will give the department a larger number of well qualified chauffeurs for service. One class of thirty men has already completed the course and another class of thirty-one men is now attending the school.

An emergency system of sending in all classes of alarms commencing with the second alarm has been established. Every officer of the department has been drilled in this system, and under it any officer or man of the department will be able to send in necessary alarms in an emergency.

The Repair Shop has been reorganized. A new bureau has been established, known as the Bureau of Supplies and Repairs, and placed in charge of the First Deputy Chief.

Arrangements have been made to have a few members of the department given a course in marine engineering at the Massachusetts Institute of Technology.

Plans to establish small libraries of books on subjects incident to fire duty have been completed. Enough copies of books will be ordered to place libraries in each fire station. The books will cover subjects of fire protection, fire prevention, hydraulics, gas and steam engines, both land and sea, telegraph, electricity, etc. The inauguration of a modified system of vocational training for the men is also under consideration.

A thorough study is being made of gas and smoke masks in order that a uniform gas mask may be adopted by the Fire Department which can be used by all the members of the department. At the present time the department has oxygen masks used by the Rescue Squad and some smoke masks.

The assignment cards of deputy and district chiefs and companies are being revised to reduce the number of chief officers and companies moving at times of large fires, and to provide more engine companies on second and subsequent alarms.

The use of 3-inch hose is being more generally extended in the department. Equal amounts of 2½-inch and 3-inch hose are being carried by the downtown companies.

In addition to the weekly drill of companies, company commanders will, in the future, hold a weekly conference

with the men and examine them in regard to location of boxes, hydrants, buildings, etc., alarms of fire, and any general question relating to the duties of a fireman.

A drill and inspection is being made of each of the companies in the department by an inspecting officer who inspects and drills the companies at their quarters, and examines the men in the location of boxes, hydrants, buildings and on matters relating to the duties of firemen.

Commencing next year the engineer of motor apparatus will maintain a constant inspection of apparatus in the various fire stations, examine from time to time the men assigned to operate the motor apparatus, and report direct through the usual official channels the results of his inspection. One of the weaknesses heretofore existing in the department has been the necessity of taking motor apparatus from the fire stations to the repair shop in order to repair minor defects. The constant supervision of the apparatus and of the men responsible for its operation by the engineer of motor apparatus will remedy this weakness to a great extent.

WIRE DIVISION.

The Wire Department which was consolidated with the Fire Department has been reorganized and placed in charge of a superintendent and is known as the Wire Division of the Fire Department.

The weather during the winter of 1919-20 was very severe, and because of the heavy and continued snow storms it was impossible to reach certain sections of the city with fire (motor or horse) apparatus. Another difficulty which followed as a result of the heavy snow storms was the breaking down of the fire apparatus and the necessity of taking it out of service. These difficulties, however, were foreseen and were met by the use of box sleighs loaded with hose and drawn by horses, which reached those sections which the apparatus could not approach. The apparatus which was withdrawn from service because of breakdowns was covered by the reserve apparatus, a policy of maintaining a large reserve of fire apparatus having been adopted in the early part of the year 1919. The department, because of the precautions taken, was able to cover all alarms of fire in the city during the winter of 1919-20. In the latter part of January, 1920, there were some fires which the department could not have reached were it not for the use of box sleighs.

The National Board of Fire Underwriters reported in December, 1916, and again in December, 1918, on the condition of the Fire Department. These reports contained recommendations which would increase the efficiency of the force, yet no attempt was made to meet the recommendations previous to February, 1919.

The causes which made necessary the recommendations have been in the main remedied this year.

HIGH PRESSURE SERVICE.

The installation of the high pressure service has progressed to such an extent that it should be in operation before January 1, 1921.

There has been a great improvement in the Fire Department not only in increased motorization, but in the maintenance of the fire apparatus of the department as a whole, compared with former years.

There has also been a decided improvement in the discipline and efficiency of the force, both rank and file. This was clearly shown during the police strike, which occurred September 9, 1919, when the officers and men of the Boston Fire Department did their full duty.

Yours very respectfully,

JOHN R. MURPHY,
Fire Commissioner.

NAMES OF CHIEF ENGINEERS, OR CHIEF OF DEPARTMENT, SINCE THE FIRE DEPARTMENT WAS ESTABLISHED, JANUARY, 1826.

Samuel D. Harris	1826-28
Thomas C. Amory	1829-35
William Barnicoat	1836-53
Elisha Smith, Jr.	1854-55
George W. Bird	1856-65
John S. Damrell	1866-74
William A. Green*	1874-84
Lewis P. Webber	1884-1901
William T. Cheswell	1901-06
John A. Mullen	1906-14
John Grady*	1914
Peter F. McDonough	1914-19
Peter E. Walsh	1919

* Appointed Fire Commissioner.

REPORT OF CHIEF OF DEPARTMENT.

FROM: THE CHIEF OF DEPARTMENT.

TO: THE FIRE COMMISSIONER.

SUBJECT: ANNUAL REPORT.

The following is the report of the Chief of Department for the year ending January 31, 1920:

During the calendar year the department responded to 5,423 alarms. The fire loss was \$2,577,584. This includes a marine loss of \$142,300.

ADDITIONS AND CHANGES.

Apparatus.

September 27, 1919, Engine Company 5, which was located temporarily in the quarters of Chemical Engine Company 7, Saratoga street, East Boston, was moved to the recently remodeled station on Marion street.

An American-LaFrance pumping engine, seventy-two horse power, with a rated pump capacity of one thousand gallons per minute; weight, fully equipped without men, 11,530 pounds, and an American-LaFrance motor-driven combination hose and chemical wagon, forty-eight horse power; weight, fully equipped without men, 9,740 pounds, was placed in service with this company. Five horses were displaced by this change.

October 23, 1919, the Robinson motor-driven combination hose and chemical wagon, in service with Engine Company 50, was displaced by an American-LaFrance motor-driven combination hose and chemical wagon; weight, fully equipped without men, 9,470 pounds.

November 8, 1919, an American-LaFrance motor-driven 75-foot aerial truck, seventy-two horse power; weight, fully equipped without men, 26,000 pounds, was placed in service with Ladder Company 1. Three horses were displaced by this change.

November 16, 1919, a Seagrave triple combination pumping engine, seventy-nine horse power, with a rated pump capacity of 800 gallons per minute; weight, fully equipped without men, 15,500 pounds, was placed in service with Engine Company 19. Five horses were displaced by this change.

Chief's Automobiles.

Five new automobiles for the use of the chief officers were put in service during the year, replacing old ones.

Automobile Trucks.

Three gasoline motor-driven trucks were furnished for the repair shop and one for the Fire Alarm Branch.

Tools and Appliances.

During the year two important devices were introduced in the department as follows: They being originated by members of the department.

The Sheehan nozzle, devised and originated by Hoseman James F. Sheehan, Chemical Company 2, was placed in service with several companies. This is a reducing nozzle and is used with $\frac{3}{4}$ -inch hose as a lead line from the nozzle of the pipe of a 2 $\frac{1}{2}$ -inch line.

An equalizing device, originated by Engineer Winfred C. Bailey, Engine Company 22, was placed on tractor-drawn apparatus. This equalizer prevents the locking of the emergency brake of the tractor and the consequent stalling of motor when under way.

The "Claw Tool," an appliance used to open doors, shutters, etc., was placed in service with the following companies, Ladders 1, 4, 8, 13 and 15.

BUILDINGS.

Many of the company houses containing motor apparatus are greatly in need of alterations, which should be made as soon as funds are available. As regards cleanliness, the houses are in good condition.

The exterior and interior wood and metal work of many of the houses have been painted since the last report.

APPARATUS AND EQUIPMENT.

The annual inspection of apparatus and equipment, including hose, was made, and the necessary repairs made to bring same up to the proper standard of efficiency.

BUILDING INSPECTION.

In accordance with section 287 of the Rules and Regulations, the following inspections were made:

Weekly building inspections were made by all officers of the fire-fighting force. A vast number of hazardous conditions were remedied and conditions tending to promote the spread of fire corrected.

Conditions that could not be remedied by verbal request were reported in writing through channels to the department headquarters and copies were forwarded to those having authority to act.

The Building Department showed a fine spirit of co-operation in correcting conditions of a hazardous nature whenever called upon to act.

Theaters and motion picture houses were inspected weekly and reports forwarded on their condition.

Fire appliances in schoolhouses and public buildings were inspected monthly and conditions reported.

The work of the inspectors of the Fire Prevention Bureau, established during the latter half of the year, showed good results in that alarms due to accumulations of rubbish in and contiguous to buildings were greatly reduced.

MUTUAL AID.

The usual fine spirit of co-operation manifested in previous years by the cities and towns on our border and adjacent thereto was shown during the year. The department responded to thirty-five alarms outside of the city.

SCHOOLS.

Sixty-eight recruits passed the drill school.

Twenty-five members passed the engineers' school.

One hundred and twenty officers and privates received instruction in the operation of automobiles.

On September 2, 1919, the Officers' School was founded for the purpose of disseminating knowledge of fire-fighting, fire prevention and to establish high professional standards among the officers and privates of the department.

Automobile School.

September 6, 1919, an automobile school was started for the officers and privates of the department to give instruction in the care and operation of motor-driven apparatus. One hundred twenty officers and privates have received instruction in this school.

HYDRANTS.

The following is the number and type of hydrants in use for fire service January 31, 1920:

Ordinary post	3,967
Boston post	3,495
Lowry	1,525
Boston Lowry	615
Boston hydrant	282
High pressure	262
Chapman post	203
Ludlow post	22
B. & F. post	5
Matthews	4
Coffin post	1
Total	<u>10,381</u>

FIRE PREVENTION DAY.

On October 9, 1919, Fire Prevention Day, the department gave an exhibition drill at the corner of Summer and Washington streets and afterwards paraded to the Franklin Union Hall, Berkeley street, where fire prevention exercises were conducted. In observance of this day the officers of the department visited public and private schools of the city and addressed the pupils on fire prevention.

ANNUAL DRILL.

On October 27, 1919, the annual company drill was established, the various companies of the department reporting at the Drill School Yard, Headquarters, Bristol street, for the purpose of performing drill evolutions under the supervision of the department drill-master.

Each company was marked according to the display of efficiency shown. Efficiency was determined by knowledge and method of handling apparatus, tools and appliances and promptness in executing commands.

Deputy Chiefs attended the drilling of the companies of their respective divisions.

The drills were finished December 27, 1919, and were very satisfactory in their results. Each company was drilled in ten evolutions, namely:

1. Connect two lines, 100 feet each, from engine to deluge set.
2. Connect two lines, 100 feet each, from engine to Morse gun.
3. Raise 50-foot ladder to fourth floor window and dog same.
4. Run 200 feet $2\frac{1}{2}$ -inch line over 50-foot ladder, up stairway and show pipe on fifth floor window.
5. Raise 30-foot ladder to the fire escape, carry 17-foot roof ladder over same to story above. Dog 30-foot ladder.
6. Run 250 feet of $2\frac{1}{2}$ inch line over 30-foot ladder, over fire escape to roof, 75 feet from ground.
7. Take life line and haul 25-foot ladder to roof 75 feet from ground.
8. Take life line, haul 200 feet $2\frac{1}{2}$ -inch line to roof.
9. Run 100 feet $2\frac{1}{2}$ -inch hose from engine, connect to Morse gate and Bresnan nozzle.
10. Connect chuck to hydrant (flexible suction) water to engine.

Drills.

The following tables show the result of the drills in which all companies participated, except the three fireboat crews. These tables show the list of companies drilling, the time consumed in each evolution, and time consumed by each company in completing all evolutions.

DIVISION ONE.

	Officers.	Men.	EVOLUTION NUMBER.																Total Time.						
			1.		2.		3.		4.		5.		6.		7.		8.				9.		10.		
			M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	
District No. 1.																									
Engine Company 5.....	1	8		42		36	1	56	2	11	1	23	2	13	2	14	1	26		32		47	14		
Engine Company 9.....	2	6		47		50	2	26	2	31	1	52	2	21	3	5	1	24		37		47	16	40	
Engine Company 11.....	2	7		55		59	1	49	2	12	1	37	2	25	3	15	1	29		41		1	15	16	37
Engine Company 40.....	1	8		46		31	1	29	1	58	1	56	2	8	2	46	1	25		28		49	14	16	
Ladder Company 2.....	1	7		52		41	1	33	2	40	1	29	2	22	2	20	2	25		40		1	15	16	17
Ladder Company 21, Chemical Com- pany 7.....	2	8		58		36	1	45	1	48	1	12	2	8	1	49	58		41			37	12	32	
District No. 2.																									
Engine Company 27.....	2	7		40		37	1	43	1	52	1	20	2	2	3	30	1	55		23		40	14	42	
Engine Company 32.....	2	6		54		25	2	23	2	33	1	45	3	12	2	50	2	22		28		27	18	19	
Engine Company 36.....	1	6		58		54	2	5	2	4	1	24	2	35	2	46	1	20		26		34	15	6	
Engine Company 50.....	2	7		52		42	1	54	1	42	1	11	2	7	2	10	1	21		26		36	13	1	
Ladder Company 9.....	1	7	1	4		43	1	30	2	4	1	14	2	17	2	22	1	57		39		56	14	46	
Ladder Company 22.....	1	6		45		31	1	42	1	44	1	13	1	42	2	9	1	37		34		39	12	36	
District No. 3.																									
Engine Company 25.....	2	7		42		33	1	45	1	56	1	5	2	8	2	22	1	1		25		33	12	30	
Engine Company 38.....	1	8		57		37	1	35	1	40	1	25	2	12	2	4	1	26		46		42	13	24	

Engine Company 39.....	1	8	39	30	1	16	1	26	1	23	1	34	1	58	2	14	30	40	12	10
Ladder Company 18.....	1	8	41	41	1	23	1	45	1	4	1	43	1	53	1	10	22	50	11	32
Ladder Company 8.....	1	9	35	28	1	1	1	22	1	4	1	33	1	35	1	15	39	41	10	13
Rescue Company 1, Tower Company 3,	2	5	32	22	1	10	1	15	43	1	35	1	47	1	48	20	33	9	5	
District No. 4.																				
Engine Company 4.....	1	7	44	37	1	33	1	53	1	26	1	56	2	27	1	27	23	35	13	1
Engine Company 6.....	1	8	49	33	1	56	1	59	1	1	1	40	1	57	1	7	25	34	13	1
Engine Company 8.....	2	11	30	26	1	4	1	24	57	1	17	1	56	48	20	25	9	7	7	
Ladder Company 1.....	1	8	50	47	57	1	54	50	2	37	2	7	1	2	21	52	12	17	17	
Ladder Company 24.....	2	7	46	56	1	10	1	36	50	1	57	1	52	58	28	57	11	30	30	
Chemical Company 1, Tower Com- pany 1.....	1	8	32	27	59	1	15	50	1	42	1	27	50	23	32	8	57	32	8	57
District No. 5.																				
Engine Company 7.....	2	9	32	24	1	19	1	58	1	9	1	59	1	30	46	18	31	10	26	26
Engine Company 10.....	2	10	25	26	1	1	1	8	45	1	32	1	46	53	31	33	9	33	9	9
Engine Company 26.....	2	9	28	26	1	16	2	8	53	1	41	1	28	53	19	30	10	2	2	2
Engine Company 35.....	2	8	33	28	1	3	1	33	1	7	1	37	1	41	50	13	26	9	31	31
Ladder Company 17.....	2	12	35	25	49	1	41	45	1	45	1	42	1	26	38	15	43	8	59	59

COMPANY RECORDS.—By DISTRICTS.

District No. 1.—Ladder Company 21 and Chemical Company 7 — 2 officers and 8 men	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
District No. 2.—Ladder Company 22 — 1 officer and 6 men	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
District No. 3.—Rescue Company 1 and Tower Company 3 — 2 officers and 5 men	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
District No. 4.—Chemical Company 1 and Tower Company 1 — 1 officer and 8 men	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
District No. 5.—Ladder Company 17 — 2 officers and 12 men	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

12 minutes 32 seconds.
 12 minutes 36 seconds.
 9 minutes 5 seconds.
 8 minutes 57 seconds.
 8 minutes 59 seconds.

DIVISION TWO.

	Officers.	Men.	EVOLUTION NUMBER.																				Total Time.	
			1.		2.		3.		4.		5.		6.		7.		8.		9.		10.			
			M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.		
District No. 6.																								
Ladder Company 19.....	1	6	41		20		1	15	1	38		57	1	55	3		51		18		36	11	31	
Engine Company 2.....	2	6	35		31		2	5	1	55	1	11	2	5	1	25	58		22		34	11	41	
Ladder Company 5.....	1	7	37		27		1	15	1	39	1	4	2	16	1	59	1	7	34		45	11	43	
Engine Company 43.....	1	7	30		33		1	2	1	19		57	1	30	1	54	41		19		26	9	11	
Ladder Company 20.....	1	6	32		32		1	6	1	25	1	2	1	34	1	49	1		25		49	10	14	
Engine Company 15.....	2	7	33		37		1	36	1	52	1	1	2	7	2	12	1	35	19		28	12	20	
Engine Company 1.....	1	7	40		24		1	16	1	38		56	1	45	2	1	50		20		32	10	22	
District No. 7.																								
Engine Company 22.....	2	10	23		20			57	1	6		52	1	17	1	38	43		11		25	7	52	
Engine Company 3.....	1	8	23		17		1	1	1	10		42	1	11	1	15	38		12		24	7	13	
Ladder Company 13.....	2	13	29		22			47	1	17		38	1	11	1	29	44		19		25	7	41	
Ladder Company 3.....	1	13	32		22			48		59		36	1	11	1	17	28		18		49	7	20	

Engine Company 33.....	2	8	24	20	57	1	14	47	1	28	1	35	36	18	24	8	3
Ladder Company 15.....	1	8	27	31	57	1	24	47	1	43	1	30	44	19	46	9	8
District No. 8.																	
Ladder Company 12.....	2	9	31	24	44	1	26	44	1	22	1	31	45	15	25	8	7
Engine Company 37.....	2	10	30	25	58	1	35	47	1	44	1	48	41	18	26	9	12
Engine Company 13.....	2	11	29	21	51	1	26	43	1	47	1	35	35	22	21	8	30
Ladder Company 26.....	1	9	26	25	57	2	5	43	1	33	1	46	42	23	25	9	25
Engine Company 14.....	2	12	25	18	1	1	24	43	1	31	1	29	32	24	29	8	16
District No. 11.																	
Ladder Company 14.....	2	9	26	22	50	1	8	46	1	29	1	53	51	17	22	8	24
Ladder Company 11.....	1	9	24	22	55	1	22	48	1	38	1	26	40	16	32	8	23
Ladder Company 31.....	1	9	27	38	55	1	13	45	1	23	1	27	36	19	35	8	18
Engine Company 34.....	1	10	35	18	1	31	24	46	1	52	1	21	43	15	30	9	15
Engine Company 29.....	1	10	27	25	58	1	24	45	1	21	1	26	45	25	25	8	21
Engine Company 41.....	1	10	24	25	53	1	7	46	1	26	1	44	32	14	23	7	54

COMPANY RECORDS.—BY DISTRICTS.

District No. 6.—Engine Company 43 — 1 officer and 7 men
 District No. 7.—Engine Company 3 — 1 officer and 8 men
 District No. 8.—Ladder Company 12 — 2 officers and 9 men
 District No. 11.—Engine Company 41 — 1 officer and 10 men

. 9 minutes 11 seconds.
 7 minutes 13 seconds.
 8 minutes 7 seconds.
 7 minutes 54 seconds.

DIVISION THREE.

	EVOLUTION NUMBER.																				Total Time.		
	Officers.	Men.	1.		2.		3.		4.		5.		6.		7.		8.		9.			10.	
			M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.		M.	S.
District No. 9.																							
Engine Company 12.....	2	10	41	19			56	1	6		54	1	30	1	55		37	15		20	8	33	
Engine Company 21.....	3	10	37	44	1	29	1	38			47	1	52	2	19		40	21		30	10	57	
Engine Company 23.....	1	12	23	21	1	4	1	28	1	6	1	48	1	31		40	26		35	9	22		
Engine Company 24.....	2	13	35	22	47	1	27	1		45	1	41	1	37		36	12		23	8	25		
Ladder Company 4.....	2	11	29	24	58	1	21			46	1	14	1	40		39	24		25	8	20		
District No. 10.																							
Engine Company 17.....	2	14	38	23	1	4	1	30			41	1	40	1	33		37	20		25	8	51	
Engine Company 18.....	2	14	40	43	1	26	1	50	1	6	1	41	1	35		46	21		28	10	36		
Ladder Company 7.....	2	9	30	31	58	1	18			55	1	37	1	32		47	16		29	8	53		
Ladder Company 29.....	1	9	32	22	1	6	1	40			45	1	30	1	36		40	14		32	8	57	
District No. 12.																							
Engine Company 28.....	2	8	31	26	1	7	1	32			59	1	35	1	35		15	31		30	10	1	
Engine Company 42.....	2	9	33	27	1	2	1	30	1	4	1	28	1	53	1	7		22	23	9	49		
Ladder Company 10.....	1	7	25	27	1	5	1	18			47	1	31	1	54	1		24	35	9	26		
Ladder Company 23.....	1	13	57	28	1	1	1	46			59	2	3	1	44		49	28	35	10	50		
Ladder Company 30.....	1	10	37	35	1	8	1	54			58	1	50	2	23	1	17	31	29	11	42		
District No. 13.																							
Engine Company 30.....	2	5	57	30	1	20	1	44	1	2	2	6	1	53		53	25		26	11	16		
Engine Company 45.....	3	12	28	28	1	34	1	48	1	15	1	1	51	1	53		54	25		31	11	7	

Ladder Company 16.....	1	7	44	36	1	15	1	35	1	17	2	2	2	2	1	13	21	45	12	10
Ladder Company 25.....	1	8	29	29	1	18	1	43		53	1	48	1	29		44	20	48	10	1
District No. 14.																				
Engine Company 16.....	2	10	36	25	1	9	1	25	1	6	1	40	1	27	1	2	26	26	9	42
Engine Company 20.....	2	11	41	35	1	7	1	33		53	1	33	2	4		45	22	31	10	4
Engine Company 46.....	2	11	30	28		53	1	36		43	1	32	1	49	38		35	23	9	7
Ladder Company 6.....	1	9	55	28	1	2	1	28	1	5	2	23	2	2	55		25	1	11	54
Ladder Company 27.....	1	9	34	26	1	14	1	42		59	1	40	2	4	50		20	25	10	14
District No. 15.																				
Engine Company 19.....	2	11	38	28	1		1	36		49	2	1	1	44	45		17	37	9	55
Engine Company 48.....	1	10	28	25	1	33	1	10		41	1	22	1	25	56		23	37	9	
Engine Company 49.....	1	10	37	27		58	1	28		48	1	32	1	21	39		21	38	8	49
Ladder Company 28.....	1	11	40	30	1	16	1	32		44	1	38	1	44	33		17	1	5	59

COMPANY RECORDS.—By DISTRICTS.

District No. 9.—Ladder Company 4—2 officers and 11 men
 District No. 10.—Engine Company 17—2 officers and 14 men
 District No. 12.—Ladder Company 10—1 officer and 7 men
 District No. 13.—Ladder Company 25—1 officer and 8 men
 District No. 14.—Engine Company 46—2 officers and 11 men
 District No. 15.—Engine Company 49—1 officer and 10 men

RECORD FOR EACH EVOLUTION.

Evolution No. 1.—Engine Company 3, Engine Company 22, Engine Company 23																				
Evolution No. 2.—Engine Company 3																				23 seconds.
Evolution No. 3.—Ladder Company 12																				17 seconds.
Evolution No. 4.—Ladder Company 3																				44 seconds.
Evolution No. 5.—Ladder Company 3																				39 seconds.
Evolution No. 6.—Engine Company 3, Ladder Company 13																				36 seconds.
Evolution No. 7.—Engine Company 3																				1 minute 11 seconds.
Evolution No. 8.—Ladder Company 3																				1 minute 15 seconds.
Evolution No. 9.—Engine Company 22																				28 seconds.
Evolution No. 10.—Engine Company 12																				11 seconds.
Best total elapsed time for ten evolutions, Engine Company 3																				20 seconds.
																				7 minutes 13 seconds.

8 minutes 20 seconds.
 8 minutes 51 seconds.
 9 minutes 26 seconds.
 10 minutes 1 second.
 9 minutes 7 seconds.
 8 minutes 49 seconds.

RECOMMENDATIONS.

Under this heading is noted repairs and alterations to fire stations, which are in my opinion necessary for the comfort of the men and the safe housing of apparatus, also the motorization of certain pieces of apparatus which will add to the efficiency of the service and at the same time tend towards reducing the cost of upkeep.

FIRE STATIONS.

I would recommend the fireproofing of the main floors of stations in which motor apparatus is housed at the earliest moment that financial conditions will permit and, in connection with this remodeling, that shower rooms be installed and separate rooms be furnished for all officers where not already provided.

The painting of all exterior wood and metal on the houses should receive consideration.

APPARATUS.

A motor-driven combination pumping engine and hose wagon, with a pump capacity of at least 1,000 gallons per minute, and a motor-driven combination hose wagon and chemical to replace the horse-drawn apparatus now in service with Engine Company 4.

A gasoline motor-driven combination pumping engine and hose wagon, with a pump capacity of at least 1,000 gallons per minute, and a motor-driven combination hose wagon and chemical to replace the horse-drawn apparatus at present in service with Engine Company 7.

A motor-driven combination pumping engine and hose wagon, with a pump capacity of at least 1,000 gallons per minute, to replace the tractor-drawn steam fire engine at present in service with Engine Company 10.

A motor-driven hose wagon for the high pressure fire service to be installed with Engine Company 35.

A tractor-driven steam fire engine, with a pump capacity of at least 900 gallons per minute, and a gasoline motor-driven combination hose wagon and chemical engine to replace the motor-driven triple combination now in service with Engine Company 15.

A motor-driven 85-foot aerial truck to replace the horse-drawn apparatus now in service with Ladder Company 26.

A motor-driven combination pumping engine and hose wagon, with a pump capacity of at least 1,000 gallons per minute, and a motor-driven combination hose and chemical wagon to replace the horse-drawn apparatus now in service with Engine Company 23.

A motor-driven triple combination pumper, with a capacity of at least 750 gallons per minute and to carry 25-foot extension and a 12-foot roof ladder to replace the city service truck now in service with Ladder Company 31. Ladder Company 31 to be disbanded and Engine Company 51 to be established in the same station.

A tractor-driven city service truck to replace the horse-drawn apparatus now in service with Ladder Company 11.

A motor-driven pumping engine and hose wagon, with a pump capacity of at least 750 gallons per minute, and a motor-driven combination hose wagon and chemical to replace the horse-drawn apparatus now in service with Engine Company 28.

A motor-driven combination pumping engine and hose wagon, with a pump capacity of at least 750 gallons per minute, to replace the tractor-drawn steam fire engine now in service with Engine Company 37.

A motor-driven combination pumping engine and hose wagon, with a capacity of at least 750 gallons per minute, to replace the tractor-drawn steam fire engine now in service with Engine Company 46.

A tractor-driven steam fire engine and motor-driven combination hose wagon and chemical engine to replace the horse-drawn apparatus now in service with Engine Company 42.

A motor-driven city service truck to replace the horse-drawn apparatus now in service with Ladder Company 10.

A tractor-drawn steam fire engine and a motor-driven combination hose wagon and chemical engine to replace the horse-drawn apparatus now in service with Engine Company 48.

A motor-driven city service truck to replace the horse-drawn apparatus now in service with Ladder Company 28.

Motor-driven fuel wagons to be located in the quarters of Engine Companies 4, 22 and 38-39.

A sufficient number of pieces of the different types of motor apparatus to be kept in reserve.

I wish to express my appreciation to all the members of the Fire Department for the excellent spirit shown by them on every occasion when called upon to perform their duties. Also my appreciation is extended to the Boston Police Department, the Boston Protective Department and to all other departments and corporations which at various times during the year rendered assistance to this department in the carrying out of its functions.

Respectfully submitted,

PETER E. WALSH,
Chief of Department.

FIRE ALARM BRANCH.

FROM: THE SUPERINTENDENT OF FIRE ALARM BRANCH.

TO: THE FIRE COMMISSIONER.

SUBJECT: ANNUAL REPORT.

I respectfully submit the following report of the Fire Alarm Branch for the fiscal year ending January 31, 1920.

OPERATING DIVISION.

NOTE.— The records of this division are for the calendar year 1919.

BOX ALARMS RECEIVED AND TRANSMITTED.

First alarms	2,702
Second alarms	40
Third alarms	7
Fourth alarms	1

BOX ALARMS RECEIVED BUT NOT TRANSMITTED.

Alarms received from same box two or more times	255
Alarms received from adjacent boxes for same fire	245
Alarms received from boxes but treated as stills	22

STILL ALARMS RECEIVED AND TRANSMITTED.

Received from citizens by telephone	1,353
Received from Police Department	196
Received from department stations	888
Box alarms not struck but treated as stills	22
"Mutual aid" alarms treated as stills	24
Emergency calls treated as stills	55
Still alarms for which box alarms were later transmitted	159

AUTOMATIC AND A. D. T. ALARMS.

Boston automatic alarms transmitted	136
Department box alarms transmitted after automatic alarms were received	8
Boston automatic alarms received after department box alarm had been struck	6
A. D. T. alarms received	50
A. D. T. alarms transmitted	39
Department box alarms received and transmitted after receipt of A. D. T. alarms	6

TOTAL ALARMS.

Box alarms received	<u>3,272</u>
Box alarms transmitted (including multiples)	2,750
Still alarms, eliminating those for which box alarms were transmitted	2,379
Boston automatic alarms	136
A. D. T. alarms	<u>39</u>
Total alarms transmitted, all classes	<u>5,304</u>

FIRE ALARM BOX RECORDS.

Boxes from which no alarms were received	429
Box tests and inspections	9,071
All keyless doors are tested weekly.	

CONSTRUCTION DIVISION.

UNDERGROUND CONSTRUCTION.

Nearly thirty thousand (30,000) feet of cable was hauled into underground ducts mostly to replace overhead wires and about seventy-eight hundred (7,800) feet of defective cable was replaced.

Twenty-two hundred and seventy-nine (2,279) feet of ducts were laid underground.

Fifteen (15) fire alarm box posts were set and two manholes were built. Nineteen (19) box posts were replaced by new.

LINE CONSTRUCTION.

About sixteen (16) miles of new line wire and about one (1) mile of cable was run on poles. Most of this work was necessary because the old wire was unsafe. Thirteen (13) miles of old wire and more than a mile of cable was removed from poles.

FIRE ALARM BOXES.

Ten (10) new fire alarm boxes were connected into service of which six (6) were installed by this department, two (2) by the Schoolhouse Department and two (2) by owners of private property.

Two (2) new box circuits were made, one (1) in Dorchester and Roxbury and one (1) in South Boston.

All boxes and box posts were painted.

TELEPHONE EXPERIMENTS.

Several experiments were made in telephoning between fire alarm boxes and the fire alarm office.

The experiments proved that while it is possible to converse over many of the box circuits satisfactorily, there are many circuits where the conditions are such that this means of communication is not practicable.

Because of the fact that telephone messages cannot be automatically recorded, like telegraph messages, no serious consideration is given to eliminating the present method as it is extremely important to have automatic records of all important messages.

CODE SIGNALS.

All officers have been given keys to inside doors of fire alarm boxes and authority to order multiple alarms as well as "all out" signals. A new set of code signals has been promulgated to be used by those who are not familiar with the Morse code.

INTERIOR CONSTRUCTION.

Much was done in department stations to bring wiring up to standard requirements and many additional lights were installed. The wiring in the stations of Engine 3 and Ladder 3, Engine 22 and Engine 26 was thoroughly overhauled. The new department garage at Harrison avenue and Wareham street was wired.

New relays for controlling red lights were installed on gong circuits in the fire alarm office.

RECOMMENDATIONS.

Notwithstanding that costs of material and labor are high it is imperative that considerable underground construction work be done this year. Only that work which was absolutely essential has been done in the past three years but conditions are now such that further delay in this work would be inadvisable.

Considerable line wire must be replaced and new circuits must be made. If building operations progress as is anticipated many new boxes must be established.

Several improvements in the fire alarm office are planned and the rewiring of several stations is contemplated.

All boxes and posts should again be painted this year and the red light system should be extended.

UNDERGROUND CABLES INSTALLED.

East Boston.

	Feet.
Byron street, Engine 11 to Bennington street:	
15-conductor	460
10-conductor	349
6-conductor	460
Bennington street, Byron street to Breed square, 10-conductor	3,400
Saratoga street, Breed square to Austin avenue, 6-conductor	1,279
Pole connections:	
10-conductor	322
6-conductor	294
4-conductor	541

City Proper.

Harrison avenue, fire alarm shop to Waltham street, 20-conductor	635
--	-----

South Boston.

Summer street, Viaduct to Harbor street, 10-conductor, ...	1,997
Dover Street Bridge, 25 conductor submarine	350
Pole connections:	
6-conductor	405
4-conductor	517

Dorchester.

Boston street, Edward Everett square to Mt. Vernon street, 6-conductor	1,037
Draper and Arcadia streets, 10-conductor	1,610
Speedwell and Norton streets, 6-conductor	955
Olney street, Bowdoin street to Blakeville street, 4-conductor	1,105
Norfolk street, Corbett street to Walk Hill street, 10-conductor	5,071
Pole connections:	
10-conductor	541
6-conductor	335
4-conductor	200

Roxbury.

West Cottage street, Blue Hill avenue to Judson street, 10-conductor	802
Cedar street, Columbus avenue to Highland street, 10-conductor	1,420

Valentine street, Washington street to Thornton street,	Feet.
4-conductor	385
Pole connections:	
10-conductor	146
4-conductor	48

West Roxbury.

Centre street, Church street to Montclair avenue, 4-conductor	1,276
Centre street, La Grange street to Spring street, 10-conductor	1,196
Pole connections, 4-conductor	285

Brighton.

Winship street, Washington street to Wallingford road,	
10-conductor	2,094

FIRE ALARM BOX POSTS INSTALLED AND DUCT LENGTHS TO SAME.

East Boston.

	Duct Feet.
Saratoga street and Austin avenue	52
Bennington and Saratoga streets	30
Bennington and Westbrook streets	15

South Boston.

Summer street, opposite D street	26
Summer and Harbor streets	33
East First and K streets	10
East Fourth and L streets	12

Dorchester.

Boston and Mt. Vernon streets	64
Norfolk street, near Capen street	3
Olney and Blakeville streets	7

Roxbury.

Cedar and Centre streets	17
Cedar and Highland streets	17

West Roxbury.

Centre and Spring streets	65
-------------------------------------	----

Brighton.

Chestnut Hill avenue and Wallingford road	40
Commonwealth avenue and Babcock street	13

NEW POLE CONNECTIONS AND DUCT LENGTHS TO SAME.

<i>East Boston.</i>		Duct Feet.
Bennington and Breed streets		58

<i>South Boston.</i>		
Summer and E streets		92
East First and K streets *		100
East First and K streets *		226

<i>Dorchester.</i>		
Bowdoin and Quincy streets		78

<i>Roxbury.</i>		
Cedar and Highland streets		7
Thornton and Valentine streets		62
Walnut avenue and Homestead street		131

<i>West Roxbury.</i>		
Centre street and Montclair avenue		50
Centre and Church streets		206
Centre and La Grange streets *		146
Centre and Spring streets		55

<i>Brighton.</i>		
Chestnut Hill avenue and Wallingford road		95
Union and Winship streets		78

MISCELLANEOUS DUCTS.		Duct Feet.
Olney street, between manholes		365
Manhole to Lincoln Power House. (Two ducts.)		98
Summer street, at C street, to retaining wall		24
From Fire Alarm Shop to Boston Fire Department garage		30

FIRE ALARM POSTS RESET.

1344. Leverett and Brighton streets (broken by truck).	
1511. Tremont street and Van Rensselaer place (broken by truck).	
1525. Tremont and Berkeley streets (change of curb),	53
1541. Tremont and Dartmouth streets (made test point)	25
1621. Washington and Compton streets (broken by truck).	

* New England Telephone & Telegraph Company furnished connections for Boston Fire Department.

2211.	Tremont and Northampton streets (broken by truck), relocated	Duct Feet. 10
2215.	Tremont and Cabot streets (change of curb)	20
2223.	Tremont and Ruggles streets (change of curb)	18
2241.	Tremont and Linden Park streets (change of curb)	27
2365.	Tremont and St. Alphonsus streets (broken by truck).	
2451.	Washington street and Montebello road (broken by truck).	
2471.	Green street and Chestnut avenue (broken by truck).	
3524.	Norfolk and Morton streets (broken by truck).	
3743.	Cleary square (change of curb)	15
634.	Meridian and Bennington streets (change of curb).	
71.	Summer and Melcher streets (out of plumb).	

TEST POSTS RESET.

Cleary square, account change of curb line. (Four ducts.)	48
Massachusetts avenue and Marlborough street (broken by truck).	.

MANHOLES BUILT.

Olney street, opposite Blakeville street.
Commonwealth avenue and Babcock street.

PUBLIC FIRE ALARM BOXES ESTABLISHED.

218.	Humboldt avenue and Waumbeck street.
2375.	Parker Hill avenue, opposite Elks' Hospital.
254.	Prospect avenue and Johnswood road.
3512.	Norfolk street, near Capen street.
62.	Cottage and Porter streets.
7163.	West Third and F streets.

SCHOOLHOUSE BOXES ESTABLISHED.

1238.	Michael Angelo School, Charter street.
3379.	Audubon School, Harvard street.

PRIVATE BOXES ESTABLISHED.

242.	House of the Angel Guardian.
7124.	United States Army Base.

FIRE ALARM BOXES IN SERVICE.

Total number	1,205
Owned by Fire Department	845
Owned by Schoolhouse Department	202
Owned by Auxiliary Fire Alarm Company	66
Privately owned	92

Department boxes:

On fire alarm box posts	414
On poles	408
On buildings	19
Inside buildings	4
Equipped with keyless doors (bell-ringing attachment	792
Equipped with keyless doors (glass guards)	47
Equipped with key doors	.6
Equipped with auxiliary attachments	14
Designated by red lights	396

Schoolhouse Boxes:

On fire alarm box posts	18
On poles	16
On outside of buildings	99
Inside of buildings	69
Equipped with keyless doors	142
Equipped with key doors	60
Equipped with auxiliary attachments	156
Designated by red lights	16

Auxiliary Fire Alarm Company Boxes:

On fire alarm box post	1
On poles	6
On outside of buildings	20
Inside of buildings	39
Equipped with keyless doors	12
Equipped with key doors	54

Private Boxes:

On poles	6
On outside of buildings	25
Inside of buildings	61
Equipped with keyless doors	13
Equipped with key doors	79
Equipped with auxiliary attachments	2

CLASSIFICATION OF FIRE ALARM BOX STATIONS.

Academies	5
Armory	1
Asylums	4
Car barns	5
Cemetery	1
Church	1
City yard	1
Homes for aged people	2
Hospitals	18
Hotels	6
<i>Carried forward</i>	44

FIRE DEPARTMENT.

31

<i>Brought forward</i>	44
Manufacturing plants	26
Museum	1
Navy yards	6
Newspaper plant	1
Office buildings	3
Police station (Chelsea)	1
Power stations	5
Prison	1
Public hall	1
Pumping station	1
Railroad shops	4
Railroad stations	5
Railroad yards	11
Restaurant	1
Schoolhouses	202
Stable	1
Stock yards	2
Street (public) boxes*	835
Theaters	28
Warehouses	6
Wharves	10
Wholesale houses	4
Total	<u>1,205</u>

POSTS AND TEST BOXES.

Fire alarm box posts in service	433
Fire alarm box posts set but not in service	7
Test posts in service	67
Pole test boxes in service	205

CIRCUITS.

Box circuits	63
Tapper circuits	14
Gong circuits	13
Telephone circuits to department stations	49
Telephone circuits to Beach Exchange	7
Telephone circuits to Back Bay Exchange	1
Special telephone circuit to Police Headquarters	1
Special telephone circuit to A. D. T. office	1
Special telephone circuit to Edison Electric Illuminating Company	1
Telephone connection to office of Boston Automatic Fire Alarm Company	1
Telephone connection to Protective Department Company No. 1, Purchase street	1

The above telephone service is from department exchange board.

* About one hundred schoolhouse and private boxes are accessible to the public, but are not counted as street boxes.

WIRES, CABLES AND CONDUITS.

Line wire in service	235 miles
Aerial cable in service	25 miles
Conductors in same	145 miles
Aerial cable conductors in service	102 miles
Underground cable in service	144 miles
Conductors in same	2,185 miles
Underground cable conductors in service	1,266 miles
Conduits owned by Fire Department	57,749 feet
Ducts in Fire Department conduits	73,165 feet
Ducts in New England Telephone and Telegraph Company system used by Fire Department	525,113 feet
Ducts in Postal Telegraph Company system used by Fire Department	4,569 feet

FIRE ALARM APPARATUS.

Tappers in service (in main circuits)	144
Boston tappers in adjacent cities and towns	6
Tappers connected to adjacent systems in Boston Fire Department stations	5
Gongs in service	115
Registers in service outside of Fire Alarm Office	25
Relays in service in department stations	13
Telephones in department system	140

PUBLIC CLOCKS.

This department keeps in operation twenty-six tower clocks, of which twenty-two are owned by the city.

Fifty-four reports of clock troubles, most of which were of minor importance, were attended to during the year.

SUMMARY OF WORK DONE.

New line wire used	82,820 feet
Old wire removed from poles	66,100 feet
Aerial cable installed (new work)	5,548 feet
Conductors in same	45,978 feet
Aerial cable removed from service	6,428 feet
Conductors in same	35,424 feet
Underground cable installed in ducts of New England Telephone and Telegraph Company	23,625 feet
Conductors in same	212,531 feet
Underground cable installed in department ducts	5,705 feet
Conductors in same	43,617 feet
Total underground cable installed (new work)	29,680 feet
Conductors in same	264,898 feet
Cable used to replace defective cable	7,784 feet
Conductors in same	143,932 feet

Conduits laid by department	2,037 feet
Ducts in same	2,279 feet
Ducts abandoned	372 feet
Manholes built	2
Fire alarm boxes installed by this department	6
Fire alarm boxes installed by schoolhouse department	2
Fire alarm boxes installed by private owners	2
Fire alarm box posts set	15
Fire alarm box posts reset or replaced by new	16
Fire alarm test posts reset	2
Fire alarm pole test boxes installed	14

GEORGE L. FICKETT,
Superintendent of Fire Alarm.

BUREAU OF SUPPLIES AND REPAIRS.

BOSTON, March 23, 1920.

FROM: THE FIRST DEPUTY CHIEF.

TO: THE FIRE COMMISSIONER.

SUBJECT: ANNUAL REPORT.

The following is a résumé of the activities of the various branches connected with the Bureau of Supplies and Repairs for the fiscal year 1919:

REPAIRS TO MOTOR APPARATUS (OUR SHOP).

Number of jobs performed	2,625
Cost of labor and material	\$47,842

The above expense was entailed in repairs to touring cars, runabouts, chemical engines, ladder trucks, water towers, pumping engines, combinations and tractors. This work involved the overhauling of motors and running gears, and the replacing of worn or broken parts with new material, *i. e.*, springs, radiators, fenders, etc.

Due to the lack of sufficient shop equipment it has been necessary for us to send out from time to time to outside concerns to have repairs made on radiators, coils, switches, magnetos, carburetors, fenders, windshields, mufflers, headlights and horns. The cost for this work is indicated in the following:

Number of jobs performed	625
Expense	\$6,681

NEW EQUIPMENT.

Two three-quarter ($\frac{3}{4}$) ton White chasses were purchased and fitted out and placed in serviceable condition by members of our shop force.

A Pierce-Arrow chassis was purchased and was fitted by the shop force with a body particularly adapted to the operations of the Rescue Squad.

A two (2) ton Mack truck was purchased for use by the Fire Alarm Branch.

A one and one-half ($1\frac{1}{2}$) ton Mack truck was purchased for use by our Bureau.

One Buick touring car and four Buick roadsters were purchased and placed in service.

The following American-LaFrance apparatus were purchased:

- 8 Combination hose and chemical cars.
- 1 High-pressure hose tender.
- 3 1,000-gallon pumping engines.
- 4 750-gallon pumping engines.
- 2 750-gallon triple combination pumpers.
- 2 85-foot aerial trucks.
- 1 75-foot aerial truck,

A rear-end unit was attached to an old Buick car by an outside concern, and will eventually be used as a coal truck.

REPAIRS AND REPLACEMENTS BY OUTSIDE CONCERNS.

- 65 New storage batteries.
- 79 Storage batteries repaired.
- 161 Springs repaired.
- 109 Radiators repaired.
- 45 Fenders repaired.
- 46 Coils and switches repaired.
- 11 Magnetos repaired.
- 5 Siren horns repaired.
- 60 Solid tires taken off, and replaced with new tires.
- 219 New pneumatic tires purchased.
- 290 New inner tubes purchased.
- 812 Inner tubes repaired
- 88 Pneumatic tires repaired.
- 41 Pneumatic tires adjusted.
- 123 Pneumatic tires scrapped.
- 122 Inner tubes scrapped.

The Motor Repair Division is under the immediate supervision of the First Deputy Chief, assisted by an engineer of motor apparatus, a shop foreman, a foreman of automobile mechanics, and mechanics.

Ten men, chosen from the fire-fighting force, and known as the Emergency Squad, are detailed to the Bureau for work on motor apparatus. The schedule of this squad is so arranged that there are always a sufficient number of men on duty at all times to take care of emergency cases.

Herewith is submitted a detailed summary of cost of maintenance of horse-drawn apparatus and equipment, also of company quarters and furnishings for the same.

REPAIRS ON HORSE-DRAWN APPARATUS (SHOP).

Number of jobs	1,650
Labor and material	\$34,446

The above expense was entailed in the replacement of springs, solid rubber tires, ladders, poles, channel irons of wheels, and band brakes. General overhauling of various pieces of apparatus was also undertaken.

Among the minor repairs and replacements was the sharpening of axes and fitting handles to the same, new handles for sledges, hammers and rakes, and renewing of worn harnesses, life belts, hose belts and fire hats.

REPAIRS ON HORSE-DRAWN APPARATUS (OUTSIDE).

Number of jobs	180
Labor and material	\$8,160

Due to the fact that we do not possess the proper equipment for certain repairs, it has been necessary to send to outside firms for the repair of shut-off nozzles, chucks, extinguishers, suction, couplings, etc.

REPAIRS TO QUARTERS HOUSING VARIOUS FIRE COMPANIES (SHOP FORCE).

Number of jobs	820
Labor and material	\$31,586

In order to preserve the condition of the houses in which the members of the fire-fighting force are quartered, the carpenters, plumbers, painters and steam-fitters connected with our Bureau attended to the many replacements from time to time, and obtained from outside firms whatever stock was necessary to make the proper repairs.

REPAIRS TO QUARTERS HOUSING VARIOUS FIRE COMPANIES (OUTSIDE).

Number of jobs	85
Labor and material	\$4,385

The above expenditure was made necessary because of the fact that our Bureau does not possess the necessary equipment to perform this class of work.

Stock, to the amount of \$450, was furnished to the various fire companies for minor repairs to houses, the same being performed by members quartered therein.

FURNITURE AND BEDDING.

Cost of repairs (outside)	\$886
Cost of repairs (our shop)	250
Stock furnished from our stock (repairs by company members)	45

FURNISHINGS PURCHASED.

50 Dozen sheets.	28 Bedsteads.
50 Dozen pillow cases.	29 Rugs.
6 Dozen bedspreads.	77 Chairs.
105 Blankets.	46 Window curtains.
37 Mattresses.	8 Clocks.
32 Pillows.	360 Towels.

The entire operations connected with this Bureau are under the immediate supervision of the First Deputy Chief.

Herewith is presented a summary of hose activities for the fiscal year 1919:

AMOUNT OF HOSE PURCHASED AND CONDEMNED,
ENDING FEBRUARY 1, 1920.

<i>Purchased.</i>		<i>Condemned.</i>	
	Feet.		Feet.
Leading cotton	8,850	Leading cotton	11,300
Chemical	1,000	Leading rubber	950
1-inch deck	100	Chemical	1,150
4-inch rubber suction	41 $\frac{2}{3}$	1-inch deck	100
Total	<u>9,991$\frac{2}{3}$</u>	4-inch-rubber suction	40 $\frac{2}{3}$
		3-inch flexible	137 $\frac{1}{2}$
		3 $\frac{1}{2}$ -inch deluge	62 $\frac{1}{2}$
		Total	<u>13,740$\frac{2}{3}$</u>

AMOUNT OF HOSE IN USE AND IN STORE FOR YEAR
ENDING FEBRUARY 1, 1920.

<i>In Use.</i>		<i>In Store.</i>	
	Feet.		Feet.
Leading cotton	121,516	Leading cotton	2,370
Leading rubber	2,700	Leading rubber	—
Chemical	17,550	Chemical	300
4-inch rubber suction	1,220	4-inch rubber suction	70
3 $\frac{1}{2}$ -inch deluge	637 $\frac{1}{2}$	3 $\frac{1}{2}$ -inch deluge	75
3-inch-flexible suction	562 $\frac{1}{2}$	3-inch flexible suction	75
1-inch deck	900	1-inch deck	—
2 $\frac{1}{2}$ -inch rubber suction	—	2 $\frac{1}{2}$ -inch rubber suction	40
Totals	<u>145,086</u>	Totals	<u>2,930</u>

Respectfully submitted,

JOHN O. TABER,
First Deputy Chief.

BOSTON FIRE DEPARTMENT, VETERINARY HOSPITAL.

Boston, February 4, 1920.

FROM: THE VETERINARY HOSPITAL.

TO: THE FIRE COMMISSIONER.

SUBJECT: ANNUAL REPORT.

SIR,— The general health and condition of the horses of this department are very good. The following is a statement of the whole number of horses in the service; those that were purchased, sold, died, pensioned, destroyed and killed in the service during the year ending January 31, 1920:

Total number on hand February 1, 1919	199
Total number on hand February 1, 1920	185
Horses purchased	9
Horses sold	12
Horses pensioned	2
Horses died	2
Horses destroyed	4
Horses killed in service	3

Respectfully submitted,

DANIEL P. KEOGH, M. D. V.

REPORT OF MEDICAL EXAMINER.

BOSTON, February 1, 1920.

FROM: MEDICAL EXAMINER.
 TO: THE FIRE COMMISSIONER.
 SUBJECT: ANNUAL REPORT.

SIR,—I respectfully submit the following report for the year ending January 31, 1920:

Number of cases of illness	653
Number of cases of injury	1,005
Number injured but remained on duty	744

EXAMINATIONS.

For appointment as provisional firemen	1
For reappointment	4
For appointment as provisional firemen (civil service)	38
For appointment as probationary firemen	68
For reappointment (as from War Service)	103
General examinations, including probationers at the expiration of their terms	1,517
Examinations at engine houses of pulmotors and medicine chests and including visits at homes of firemen and to hospitals	175

During the past winter the long continued and extreme cold weather with deep snow called for a greater physical exertion than in years past and was the occasion of unusual and severe exposure and suffering from frost bites and pulmonary and bronchial affections on the part of the men in performance of fire duty. It is worthy of note and also of commendation that out of a total of 1,005 men injured, 744 remained on duty. The commanding officers have rendered a great public service on many occasions by intelligent effort in the use of pulmotors and of various medicines and appliances of the medicine chests as a "first aid" to citizens as well as to firemen.

DEATHS.

NAME.	Date.	Cause.
Warren A. Chase.....	Feb. 6, 1919	Appendicitis and general peritonitis.
Thomas J. Stevens.....	Feb. 15, 1919	Compound fracture of left leg; shock and hemorrhage.
Henry H. F. Keenan.....	May 19, 1919	Pulmonary tuberculosis.
Lieut. Michael J. Sullivan...	Aug. 16, 1919	Pulmonary tuberculosis.
James F. O'Hare.....	Nov. 18, 1919	Broncho-pneumonia.
John H. Belyea.....	Jan. 31, 1920	Lobar pneumonia.

Respectfully submitted,

WILLIAM J. McNALLY, M. D.,
Medical Examiner.

REPORT OF WIRE DIVISION.

BOSTON, February 1, 1920.

FROM: THE SUPERINTENDENT, WIRE DIVISION.

TO: THE FIRE COMMISSIONER.

SUBJECT: ANNUAL REPORT.

I herewith submit annual report of the Wire Department; also the Wire Division of the Fire Department for the year 1919-20.

The underground district for 1920 has been prescribed and advertised in accordance with the law. The main streets, avenues and highways, or parts thereof, are as follows:

DORCHESTER.

Adams street, from King square to Minot street, Dorchester, 5,374 feet.

ROXBURY.

Humboldt avenue, from Walnut avenue to Seaver street, 4,380 feet.

BRIGHTON.

Market street, from Washington street to Western avenue, 5,000 feet.

Tremont street, Brighton, from Washington street, a distance of 1,086 feet to within 731 feet of the Newton line, 1,086 feet.

Making a total distance of three miles, as provided by law.

Side streets, avenues, or highways, or parts thereof:

EAST BOSTON.

Bennington street, from Day square, a distance of one half mile easterly to within 327 feet of Moore street, East Boston, 2,640 feet.

CHARLESTOWN.

Park street, from City square to Common street, Charlestown, 743 feet.

Wapping street, from Chelsea street to Water street, 462 feet.

SOUTH BOSTON.

H street, from East First street, a distance of one half mile to within 44 feet of Columbia road, 2,640 feet.

I street, from East First street, a distance of one half mile to within 42 feet of Marine road, 2,640 feet.

B street, from West Broadway, a distance of 1,046 feet to within 132 feet of West Seventh street, South Boston, 1,046 feet.

DORCHESTER.

Savin Hill avenue, from Dorchester avenue to Pleasant street, 389 feet.

Making a distance of two miles, as provided by law.

The following data gives the details of the work done by the division:

The losses from sixty-four fires, due directly or indirectly to electrical causes, were \$57,239.44, one fire being estimated at \$50,000. These fires have received the attention of this division.

The electrical equipment of theaters, hotels, department stores and other buildings where there is danger to life has received particular attention during the year, as have also overhead and underground construction throughout the city.

The violations of the law relating to the notification to and the obtaining of a permit from this division in connection with the installation of electrical apparatus and wiring within buildings have been very few, and it has not been necessary to have any prosecutions made under the law.

The total income was \$30,641.48, which includes \$125 for old wagon and horse.

It is my intention during the coming year to give more attention to the inspection of old installations, especially in the business portion of the city.

Yours very truly,

WALTER J. BURKE,
Superintendent.

EXTERIOR DIVISION.

The underground district for the year 1919, as prescribed under authority of chapter 196 of the Special Acts of 1916, comprised the following main and side streets:

MAIN STREETS.

Roxbury.

Centre street, from a point 207 feet northerly of Cedar street to Columbus avenue.

Jamaica Plain.

Centre street, from a point 98 feet northerly of Boylston street to Holbrook street.

South Boston and Dorchester.

Boston street, from Andrew square to Edward Everett square.
East First street, from Dorchester street easterly to a point 255 feet beyond L street.

Dorchester.

Stoughton street, from Columbia road to Pleasant street.
Pleasant street, from Stoughton street to Hancock street.
Hancock street, from Pleasant street to Dorchester avenue.

Making a total distance of three miles as provided by law.

SIDE STREETS.

Roxbury.

Shawmut avenue, from a point 100 feet northerly of Vernon street to Roxbury street.
Walnut avenue, from a point 100 feet southerly of Dale street to Seaver street.
Highland street, from Centre street to Marcella street.
Marcella street, from Highland street to a point 127 feet northerly of Vale street.

Dorchester.

Norfolk street, from a point 62 feet southerly from Evelyn street to a point 171 feet northerly of Walk Hill street.
Ashmont street, from Dorchester avenue to Alban street.

Brighton.

Chestnut Hill avenue, from Wallingford road to Washington street.

South Boston.

K street, from East First street to a point 112 feet beyond East Seventh street.

Making a total distance of two miles as provided by law.

In the prescribed streets, from which poles and overhead wires were to be removed, there were standing on February 1, 1919, a total of two hundred twenty-two (222) poles (not including the trolley poles of the Boston Elevated Railway Company, which are exempt), supporting one million three hundred eighty-one thousand nine hundred (1,381,900) feet of overhead wires.

The number of poles and feet of overhead wires to be removed, by districts, are as follows:

Roxbury district, 39 poles and 162,280 feet of overhead wires; Jamaica Plain, 44 poles and 64,200 feet of overhead wires; South Boston, 35 poles and 285,300 feet of overhead wires; Dorchester, 86 poles and 848,320 feet of overhead wires; Brighton, 18 poles and 21,800 feet of overhead wires.

In the selection of new pole locations our engineers have accompanied the engineers of the various companies for the purpose of passing on such locations.

All poles standing in the streets are stenciled by this department for purposes of identification. All poles standing in the city are inspected and tested yearly by the inspectors of this division and at the same time a general inspection is made of all overhead construction. This work, of course, is in addition to the regular inspection work necessary on account of new construction.

During the past year poles reported decayed at base or leaning have been replaced by new poles or reset by the various companies at request of this division.

The following table shows the overhead work for the year from February 1, 1919, to January 31, 1920, inclusive:

Number of streets included in orders granted by the Board of Street Commissioners to set poles	111
Number of poles included in above orders to set poles, ...	217
Orders granted by the Commissioner of Wires and Fire Commissioner to set terminal poles	10
Number of streets included in above orders granted by the Board of Street Commissioners to remove poles	58
Number of poles included in above orders to remove poles	65
Number of new poles set in new locations	8
Number of poles replaced, reset or straightened	584
Number of poles removed (abandoned)	3
Number of poles now standing in the public streets, ...	15,558
Number of defects reported	5,828
Number of defects corrected	5,353
(Other defects in process of correction.)	
Number of notices of overhead construction	23,166
Number of overhead inspections	66,869
Number of overhead reports	24,808
Number of overhead wires removed by owners (in feet)	1,523,186

The Board of Street Commissioners has also passed the following orders which come under the jurisdiction of this department, inasmuch as they pertain in one way or another to overhead or underground wires:

Fire alarm and test box locations	4
Attachment of one company's wires to poles of another	43
To stretch overhead wires across public streets	3
Extension of street railway tracks, etc.	25

The ducts used this year for the underground conduits of the drawing-in system are of the following type:

1. Vitrified clay (laid in concrete).
2. Fiber (laid in concrete).
3. Iron.
4. Wood.

In side or residential streets a small amount of special underground construction for electric light and power purposes of a type known as the "Split Fibre Solid Main System" has been installed during the year, comprising 2,073 feet of conduit, 4,519 feet of duct and twenty-three service boxes.

The following companies or individuals have laid new conduits, enlarged existing conduits, or added to their underground cables during the year:

For Electric Light and Power Purposes.

Boston Elevated Railway Company.
 Charlestown Gas and Electric Company.
 Edison Electric Illuminating Company.
 Pittsburg Oil Company.

For Telephone, Telegraph, Signaling and other Purposes.

Boston Fire Department (Fire Alarm Branch).
 Boston Low Tension Wire Association.
 Boston Police Department (Police Signal Service).
 Boston Schoolhouse Commission.
 Mutual District Messenger Company.
 New England Telephone and Telegraph Company.
 Western Union Telegraph Company.

Orders were passed during the year by the Commissioner of Wires and Fire Commissioner, under authority of chapter 268 of the Special Acts of 1915, granting locations for underground conduits for electric wires in one hundred seventy-five (175) streets.

The electrical approvals for underground electrical construction numbered one thousand seven hundred sixty-four (1,764). Number of inspections of underground electrical construction, eight thousand four hundred ninety-five (8,495). Number of reports of underground electrical construction, one thousand eight hundred forty-two (1,842).

Character of Cable Used by the Various Companies.

COMPANY.	Kind of Insulation.	Size.
Boston Elevated Railway Co.....	Rubber and paper..	No. 4-0 and 500,000, 1,000,000 C. M.
Charlestown Gas and Electric Co....	Varnished cambric..	No. 4-0.
Edison Electric Illuminating Co.....	Rubber and paper..	No. 8 to 1,000,000 C. M.
Fire Alarm Branch (B. F. D.).....	Rubber.....	4, 6, 10, 15, 20 and 25 conductors.
Mutual District Messenger Co.....	Paper and rubber..	10 pair, 10 and 25 conductor.
New England Tel. and Tel. Co.....	Paper.....	3 to 1,200 pair.
Police Signal Service (B. P. D.).....	Rubber.....	7 conductor.
Schoolhouse Commission (City of Boston).	Rubber.....	4 conductor.
Western Union Telegraph Co.....	Rubber.....	62 and 162 pair.

Table Showing Underground Work for the Year 1919.

COMPANY.	Feet of Conduit.	Feet of Duct.	Feet of Cable.	Number of Manholes.	Number of Services.
Boston Elevated Railway Co.....	17,896	111,296	30,191	61	11
Boston Low Tension Wire Association..	190	1,744	.....	2	5
Charlestown Gas and Electric Co.....	341	3,022	15,391	3	13
Edison Electric Illuminating Co.....	39,144	343,910	270,861	258	776
Fire Alarm Branch (B. F. D.).....	472	2,793	30,418	2	26
Mutual District Messenger Co.....	.....	.....	512	.....	.....
New England Tel. and Tel. Co.....	19,660	125,737	155,319	45	172
Pittsburgh Oil Co.....	59	59	.....	.....	1
Police Signal Service (B. P. D.).....	.....	1,020	7,025	2	13
Schoolhouse Commission.....	.....	1,334	3,500	2	6
Western Union Telegraph Co.....	5,367	19,412	9,900	12	6
Totals.....	83,129	610,327	523,117	387	1,029

NOTE.— "Split Fibre Solid Main System" of the Edison Electric Illuminating Company is included in the above figures, comprising 2,073 feet of conduit and 4,519 feet single duct; the main and feeder tube or armored cable of same company are not included; 155 feet of main three-wire tube and 4,288 feet of three-wire armored service cable were laid during the year.

Table Showing the Amount and Distribution of Boston's Electrical Power January 31, 1920.

COMPANY.	Total Rated Horse Power of Boilers.	Total Rated Horse Power of Engines.	Capacity of Incandescent Lamps in Kilowatts.	Capacity of Arc Lamps in Kilowatts.	Kilowatts of Motors.	Kilowatts Mixed Loads.	Number of Stations.
Boston Elevated Railway Company....	53,020	211,470	3,816	30	382,075	71,760	19
Edison Electric Illuminating Company..	43,664	195,400	83,212	2,889	76,523	83,847	38
Charlestown Gas and Electric Company, .....	.....	.....	*	178	13,071	*	1
Block Plant Electric Light Company....	278	369	277	.....	.....	.....	.....
A. W. Barnes Steam Specialty Company,	620	400	105	.....	106	.....	1
Sudbury Building Plant.....	202	250	32	.....	31	.....	1
Hanover Street Trust.....	500	400	174	33	138	.....	1
Totals.....	98,284	408,289	87,616	3,130	471,944	155,607	61

* Unknown.

INTERIOR WORK.

As provided by law there have been twelve hundred thirteen (1,213) inspections made of theaters, places of amusement and public halls. When an inspection shows that a defective condition exists, the owners or lessees are notified at once, and if defect is not corrected within a reasonable time the current is ordered to be discontinued.

In addition to the inspections referred to above, weekly inspections were made of the electrical equipment of traveling theatrical companies and shows fulfilling engagements at the various theaters and places of amusement, also of such temporary work as had been installed by or under the authority of the proprietors or managers of the premises.

Inspections of new and old electrical equipments have been carried on in so far as practicable.

Income received for fees to turn current on new wiring was \$3,964.50, and for permits to install wiring or electrical apparatus, \$26,551.98, making a total of \$30,516.48. Sixty-four fires and twelve accidents to persons,— one of which was fatal,— have been investigated as per the following table:

Fires in interior of buildings	41
Fires on poles	1
Manhole explosions	3
Miscellaneous exterior	13
Car fires	6
Injuries to persons	11
Deaths	1
Notices of new work received	14,886
Buildings in which wiring was completely examined . .	1,498
Inspections made	33,853
Defects reported	1,827
Defects corrected	903
(Other defects in process of correction.)	

LIST OF WIRE DIVISION EMPLOYEES,
JANUARY 31, 1920.

	Salary per Annum.
1 Superintendent	\$2,300 00
1 Chief inspector	2,200 00
1 Inspector	1,800 00
1 Chief clerk	1,800 00
1 Engineer	1,800 00
1 Permit clerk and inspector	1,800 00
1 Assistant chief clerk	1,700 00
1 Engineer	1,700 00
6 Inspectors	1,700 00
7 Inspectors	1,600 00
8 Inspectors	1,500 00
1 inspector	1,400 00
1 Clerk and stenographer	1,400 00
5 Inspectors	1,300 00
2 Inspectors	1,200 00
1 Chauffeur	1,200 00
1 Driver	1,100 00
1 Stenciler	1,100 00
1 Assistant stenciler	1,092 00
2 Clerks	1,000 00
1 Stenographer	1,000 00
1 Stenographer (temporary)	936 00

STATEMENT OF APPROPRIATION AND EX-
PENDITURES FROM FEBRUARY 1, 1919, TO
JANUARY 31, 1920, INCLUSIVE.

Appropriation \$81,120 89

EXPENDITURES.

Salaries and wages:

A-1.	James E. Cole, commis-	
	sioner	\$410 96
A-1.	Employees	67,605 86
F-7.	Pension roll	600 00
B-1.	Printing	17 32
B-2.	Postage	175 00
B-3.	Advertising	95 00
B-4.	Car fares	1,806 93
B-12.	Premium on bond	6 00
B-14.	Motor vehicles, repairs	
	and garage rent	596 18
B-16.	Care of horse	228 00
B-35.	Fees for auto, etc.	10 00
B-37.	Photo and blueprinting	4 25
B-39.	Repairs to instruments,	
	etc.	116 71
B-41.	Horseshoeing	48 00
C-3.	Electric torches	15 81
C-4.	Ford truck, tires, etc.	1,150 83
C-6.	Stable, blankets, etc.	10 00
C-13.	Tools, etc.	41 80
D-1.	Office, forms and station-	
	ery	1,315 34
D-11.	Gasolene, oil, etc.	407 95
E-10.	Batteries for torches	5 40
E-13.	Paint stock	54 25
	Total expenditures	\$74,721 59
	Transferred to the Fire Depart-	
	ment	401 00
	Balance in treasury	5,998 30
		<u>\$81,120 89</u>

LIST OF PROPERTY.—WIRE DIVISION.

- 1 High potential testing apparatus.
- 1 transformer.
- 1 Test board, capacity 220 volts, 300 amperes.
- 1 Auxiliary test board, capacity 220 volts, 150 amperes.
- 1 Reflecting galvanometer, condenser, telescope, scales, etc.
- 1 Set resistance coils (standard).
- 1 Lamp stand and scale.
- 1 Shunt coil.
- 1 Set double connector posts.
- 1 Discharge key.
- 1 Reversing key.
- 1 Electrostatic Voltmeter, No. 70647.
- 1 1,500-volt Direct Current Voltmeter, No. 3438.
- 1 300-volt Weston Direct Current Voltmeter, No. 3317.
- 1 300-volt Weston Direct Current Voltmeter, No. 6020.
- 1 300-volt Weston Direct Current Voltmeter, No. 15459.
- 1 300-volt Weston Direct Current Voltmeter, No. 15455.
- 1 300-volt Weston Portable Direct Current Voltmeter, No. 15456.
- 1 300-volt Weston Alternating Direct Current Voltmeter, No. 1044.
- 1 15-volt Weston Direct Current Voltmeter, No. 4747.
- 1 3-150-volt Weston Direct Current Voltmeter, No. 2147, Miniature Type.
- 1 0-150 to 300 Double Reading Weston Direct Current Voltmeter, No. 28981.
- 1 0-150 to 300 Double Reading Weston Direct Current Voltmeter, No. 28982.
- 1 0-150, 0-300 A. C. & D. C. Weston Voltmeter, No. 147.
- 1 500-ampere Weston Direct Current Ammeter, No. 2428.
- 1 50-ampere Weston Direct Current Ammeter, No. 2381.
- 1 1,500 mil-ampere Weston Direct Current Mil-Ammeter, No. 2433.
- 1 200-ampere T. & H. A. C. Ammeter, No. 29421.
- 1 15-ampere T. & H. A. C. Ammeter, No. 21507.
- 1 Queen testing set, No. 389.
- 1 Standard resistance coil with wheatstone bridge.
- 1 Generator, 50,000 ohms.
- 6 Bichloride of silver batteries, each 60 cells.
- 2 Automobiles (1 touring car, 1 Ford truck).
- 3 Robes.
- 2 Blankets.
- 2 Cameras (complete).
- Miscellaneous tools used in connection with overhead construction.
- Draughting instruments.

THE DEPARTMENT ORGANIZATION.

Commissioner, JOHN R. MURPHY.
 Chief Clerk, BENJAMIN F. UNDERHILL.
 Chief of Department, PETER E. WALSH.
 First Deputy Chief, JOHN O. TABER, in charge of Bureau
 of Supplies and Repairs.
 Superintendent of Repairs, EUGENE M. BYINGTON.
 Superintendent of Fire Alarms, GEORGE L. FICKETT.
 Superintendent of Wire Division, WALTER J. BURKE.
 Chief Operator and Assistant Superintendent of Fire Alarms,
 RICHARD DONAHUE.
 Chief Clerk, Wire Division, FRANK H. RICE.
 Veterinary Surgeon, DANIEL P. KEOGH.
 Medical Examiner, WILLIAM J. McNALLY.

CLERKS.

(Fire Department.)

George F. Murphy, Daniel J. Quinn, James P. Maloney,
 Edward L. Tierney, Herbert J. Hickey, John J. Coholan,
 William J. Hurley, Nathan Cohen, Frank M. Fogarty.

(Wire Division.)

John F. Flanagan, Timothy A. Connolly, William McSweeney,
 George Stretch, Selina A. O'Brien, Mary E. Fleming,
 Margaret A. Faulkner.

STRENGTH AND PAY JANUARY 31, 1920.

HEADQUARTERS.

	Per Annum.
1 Commissioner	\$7,500
1 Chief clerk	2,500
1 Medical examiner	1,800
1 Bookkeeper	2,100
1 Supervisor pay accounts	2,000
1 Clerk	1,800
1 Chief, License Division	1,800
1 Clerk	1,600
1 Clerk	1,500
1 Clerk	1,000
1 Assistant engineer (messenger)	1,600

	Per Annum.
2 Hosemen (clerks)	\$1,600
1 Constable	1,200

 14

FIRE-FIGHTING BRANCH.

1 Chief of department	\$4,500
2 Deputy chiefs	3,500
15 Districts chiefs	3,000
62 Captains	2,000
91 Lieutenants	1,800
1 Lieutenant, aide-to-chief *	1,800
1 Private, aide-to-commissioner *	1,600
3 Engineers (marine)	1,700
48 Engineers	1,700
46 Assistant engineers	1,600
1 Assistant engineer	1,500
3 Assistant engineers	1,400
932 Privates (6 at war service included):	
534	1,600
10	1,500
388	1,400

 1,206

BUREAU OF SUPPLIES AND REPAIRS.

1 Superintendent	\$3,000
1 Lieutenant, foreman hose and harness shop,*	1,800
1 Engineer (master plumber *)	1,700
1 Hoseman (master carpenter *)	1,600
1 Master painter	1,600
1 Auto engineer (engineer*)	1,700
1 foreman auto mechanics	1,500
1 Engineer (machinist*)	1,700
6 Privates *	1,600

Employees.

1 Clerk	\$1,700
1 Clerk	1,300
1 Clerk (hoseman *)	1,600
1 Storekeeper *	1,800

Per Week.

1 Engineer	\$37 00
----------------------	---------

Per Day.

3 Firemen	\$5 00
2 Plumbers	4 90
1 Steamfitter	4 50
1 Leading painter	4 75

* Detailed from fire-fighting force.

	Per Day.
7 Painters	\$4 50
2 Wheelwrights	4 50
1 Leading machinist	4 75
13 Machinists (including 2 temporary)	4 50
1 Leading blacksmith	4 75
4 Blacksmiths	4 50
5 Blacksmith's helpers	3 75
3 Carpenters	4 50
1 Vulcanizer	4 00
2 Hose and harness repairers	4 50
1 Hose and harness repairer	4 00
1 Boiler repairer and ironworker	4 50
1 Chauffeur	4 00
2 Teamsters	3 50

70

FIRE ALARM BRANCH.

	Per Annum.
1 Superintendent	\$3,000
1 Chief operator and assistant superintendent, ...	2,500
1 Supervising operator	1,800
4 Principal operators	1,800
2 Operators	1,600
6 Assistant operators	1,400
1 Assistant operator	1,300
1 Hoseman (garageman)*	1,600

Construction Force.

1 Foreman	2,200
1 Assistant foreman	1,700
1 Stockman	1,500
	Per Day.
1 Machinist	\$4 75
2 Machinists	4 50
18 Repairers, cable splicers, linemen and wiremen, ...	4 95
1 Laborer	3 50

42

VETERINARY HOSPITAL BRANCH.

	Per Annum.
1 Veterinarian	\$3,000
	Per Day.
3 Hostlers (average)	\$3 50

4

1,336

* Detailed from fire-fighting force.

CHIEF OF DEPARTMENT.

PETER E. WALSH.

Headquarters, Engine House 26-35, Mason Street.

The Chief is in charge of the fire protection of the city, which is divided into three divisions, each commanded by a deputy chief, which are subdivided into fifteen districts, each commanded by a district chief.

DIVISION 1.

Deputy Chief, JOHN O. TABER.

Headquarters, Ladder House 8, Fort Hill Square.

This division comprises Districts 1, 2, 3, 4, 5.

*District 1.**District Chief*, FITZGERALD M. O'LALOR.Headquarters, Ladder House 2, Paris Street,
East Boston.*Apparatus Located in the District.*—Engines 5, 9, 11, 31 (fireboat), 40, 47 (fireboat), Ladders 2, 21, Chemical 7.*District 2.**District Chief*, WILLIAM E. RILEY.Headquarters, Ladder House 9, Main Street,
Charlestown.*Apparatus Located in the District.*—Engines 27, 32, 36, 50, Ladders 9, 22.*District 3.**District Chief*, CORNELIUS J. O'BRIEN.

Headquarters, Ladder House 18, Pittsburgh Street.

Apparatus Located in the District.—Engines 25, 38, 39, 44 (fireboat), Ladders 8, 18, Water Tower 3, Rescue 1.*District 4.**District Chief*, EDWARD J. SHALLOW.

Headquarters, Engine House 4, Bulfinch Street.

Apparatus Located in the District.—Engines 4, 6, 8, Ladders 1, 24, Chemical 1, Water Tower 1.

District 5.

District Chief, ALBERT J. CAULFIELD.

Headquarters, Engine House 26-35, Mason Street.

Apparatus Located in the District.—Engines 7, 10, 26, 35, Ladder 17, Chemical 2.

DIVISION 2.

Acting Deputy Chief, HENRY A. FOX.

Headquarters, Engine House 22, Warren Avenue.

This division comprises Districts 6, 7, 8, 11.

District 6.

District Chief, FRANCIS J. JORDAN.

Headquarters, Engine House 1, Dorchester Street,
South Boston.

Apparatus Located in the District.—Engines 1, 2, 15, 43, Ladders 5, 19, 20.

District 7.

District Chief, FRANK A. SWEENEY.

Headquarters, Engine House 22, Warren Avenue.

Apparatus Located in the District.—Engines 3, 22, 33, Ladders 3, 13, 15, Water Tower 2.

District 8.

District Chief, JOHN N. LALLY.

Headquarters, Ladder House 12, Tremont Street.

Apparatus Located in the District.—Engines 13, 14, 37, Ladders 12, 26.

District 11.

District Chief.

Headquarters, Engine House 41, Harvard Avenue,
Brighton.

Apparatus Located in the District.—Engines 29, 34, 41, Ladders 11, 14, 31.

DIVISION 3.

Deputy Chief, DANIEL F. SENNOTT.

Headquarters, Ladder House 4, Dudley Street.

This division comprises Districts 9, 10, 12, 13, 14, 15.

District 9.

District Chief, JOSEPH H. KENNEY.

Headquarters, Engine House 12, Dudley Street.

Apparatus Located in the District.—Engines 12, 21, 23, 24, Ladder 4, Chemical 10.

District 10.

District Chief, WALTER M. McLEAN.

Headquarters, Engine House 18, Harvard Street,
Dorchester.

Apparatus Located in the District.—Engines 17, 18, Ladders 7, 29, Chemical 11.

District 12.

District Chief, MICHAEL J. MULLIGAN.

Headquarters, Engine House 28, Centre Street,
Jamaica Plain.

Apparatus Located in the District.—Engines 28, 42, Ladders 10, 23, 30, Chemical 5.

District 13.

District Chief, MICHAEL J. KENNEDY.

Headquarters, Engine House 45, Corner Washington
and Poplar Streets, Roslindale.

Apparatus Located in the District.—Engines 30, 45, Ladders 16, 25, Chemical 13.

District 14.

District Chief, ALLAN J. MACDONALD.

Headquarters, Engine House 46, Peabody Square,
Dorchester.

Apparatus Located in the District.—Engines 16, 20, 46, Ladders 6, 27.

District 15.

District Chief, JOSEPH A. DOLAN.

Headquarters, Engine House 48, Corner Harvard
Avenue and Winthrop Street, Hyde Park.

Apparatus Located in the District.—Engines 19, 48, 49, Ladder 28, Chemical 14.

FIRE STATIONS.

LOCATION.

LOCATION.	Number of Feet in Lot.	Occupied by
Dorchester and Fourth streets.....	8,167	Engine 1 and Ladder 5.
Corner of O and Fourth streets.....	4,000	Engine 2.
Bristol street and Harrison avenue.....	4,000	Engine 3 and Ladder 3.
Bulfinch street.....	6,098	Engine 4, Chemical 1 and Tower 1.
Marion street, East Boston.....	3,265	Engine 5.
Leverett street.....	2,269	Engine 6.
East street.....	1,893	Engine 7.
Salem street.....	2,568	Engine 8.
Paris street, East Boston.....	4,720	Engine 9 and Ladder 2.
River street.....	1,886	Engine 10.
Saratoga and Byron streets, East Boston,	10,000	Engine 11 and Ladder 21.
Dudley street.....	7,320	Engine 12.
Cabot street.....	4,832	Engine 13.
Centre street.....	5,713	Engine 14.
Dorchester avenue.....	2,803	Engine 15.
Corner River and Temple streets.....	12,736	Engine 16 and Ladder 6.
Meeting House Hill, Dorchester.....	9,450	Engine 17 and Ladder 7.
Harvard street, Dorchester.....	9,440	Engine 18.
Norfolk street, Dorchester.....	7,683	Engine 19.
Walnut street, Dorchester.....	9,000	Engine 20 and Ladder 27.
Columbia road, Dorchester.....	10,341	Engine 21.
Warren avenue.....	7,500	Engine 22 and Ladder 13.
Northampton street.....	3,445	Engine 23.
Corner Warren and Quincy streets.....	4,186	Engine 24.
Fort Hill square.....	4,175	Engine 25 and Ladder 8.
Mason street.....	5,623	Engines 26 and 35.
Elm street, Charlestown.....	2,600	Engine 27.
Centre street, Jamaica Plain.....	10,377	Engine 28 and Ladder 10.
Chestnut Hill avenue, Brighton.....	14,358	Engine 29 and Ladder 11.
Centre street, West Roxbury.....	12,251	Engine 30 and Ladder 25.
521 Commercial street, on land of Public Works Department.	.....	Engine 31, fireboat.

Fire Stations. — *Concluded.*

LOCATION.	Number of Feet in Lot.	Occupied by
Bunker Hill street, Charlestown.....	8,188	Engine 32.
Corner Boylston and Hereford streets...	5,646	Engine 33 and Ladder 15.
Western avenue, Brighton.....	4,637	Engine 34.
Monument street, Charlestown.....	5,668	Engine 36 and Ladder 22.
Corner Longwood and Brookline avenues,	5,231	Engine 37 and Ladder 26.
Congress street.....	4,000	Engines 38 and 39.
Sumner street, East Boston.....	4,010	Engine 40.
Harvard avenue, near Cambridge street, Brighton.	6,112	Engine 41 and Ladder 14.
Washington street, at Egleston square...	3,848	Engine 42 and Ladder 30.
Andrew square.....	5,133	Engine 43 and Ladder 20.
Northern Avenue Bridge.....		Engine 44, fireboat.
Washington and Poplar streets, Roslin- dale.	14,729	Engine 45 and Ladder 16.
Dorchester avenue, Ashmont.....	4,875	Engine 46.
Adjoining South Ferry, East Boston....	11,950	Engine 47, fireboat.
Harvard avenue and Winthrop street, Hyde Park.	9,450	Engine 48, Ladder 28 and Chemical 14.
Church street.....	3,412	Chemical Engine 2.
Milton and Hamilton streets.....	14,475	Engine 49.
Winthrop and Soley streets.....	5,230	Engine 50.
Saratoga street, East Boston.....	9,300	Chemical Engine 7.
Corner Callender and Lyford streets....	7,200	Chemical 11 and Ladder 29.
Corner Walk Hill and Wenham streets..	11,253	Chemical 13.
Friend street.....	1,676	Ladder 1.
Dudley street.....	3,923	Ladder 4 and Chemical 10.
Main street, Charlestown.....	4,290	Ladder 9.
Tremont street.....	4,311	Ladder 12.
Harrison avenue.....	2,134	Ladder 17.
Pittsburgh street, South Boston.....	8,964	Ladder 18 and Tower 3.
Fourth street.....	3,101	Ladder 19.
Washington street, Dorchester.....	6,875	Ladder 23 and Chemical 5.
North Grove street.....	3,918	Ladder 24.
Oak square, Brighton.....	9,889	Ladder 31.

Headquarters Building, Bristol street, 15,679 feet of land.

Water Tower No. 2 is in Headquarters Building.

OTHER BUILDINGS.

Repair Shop, 363 Albany street, 8,000 feet of land.

Veterinary Hospital, Atkinson street, 64,442 feet of land.

Coal station, Main street, Charlestown, 2,430 feet of land.

Coal station, old Charles River Bridge, on land of Public Works Department.

Building No. 11 Wareham street, used by the Fire Alarm Branch as workshop and storeroom, 8,500 feet of land.

Building No. 618 Harrison avenue, used as a department garage and repair shop and a school for chauffeurs and officers, 3,816 feet of land.

LEASED BUILDINGS.

Part of building 240-256 Dover street used as storehouse for spare apparatus.

About 800 square feet of shed on Sleeper street (New Haven Terminal Stores) used as a coal station.

Part of building 11 Atherton street used for storage.

CANNEL COAL STATIONS.

DIVISION 1.

DISTRICT.	Location.	Capacity. (Tons.)	Wagons.
1.....	Engine 11.....	12	1
1.....	Engine 40.....	20	2
2.....	Engine 36.....	35	1
2.....	Ladder 9.....	35	2
3.....	Sleeper street.....	45	3
3.....	Ladder 18.....	1	
4.....	Ladder 24.....	16	2
4.....	Charles River avenue.....	50	2
5.....	Engine 26.....	20	1
Total.....	.....	.....	14

DIVISION 2.

5.....	Chemical 2.....	35	3
6.....	Engine 2.....	20	1
6.....	Fourth street.....	20	2
7.....	Engine 33.....	25	1
8.....	Engine 13.....	40	1
8.....	Engine 14.....	10	1
8.....	Engine 37.....	20	1
11.....	Engine 29.....	7	1
11.....	Engine 34.....	7	1
11.....	Engine 41.....	10	1
Total.....	.....	.....	13

DIVISION 3.

9.....	Engine 12.....	5	1
9.....	Engine 21.....	6	1
9.....	Engine 23.....	5	1
9.....	Engine 24.....	7	1

Cannel Coal Stations, Division 3.—Concluded.

DISTRICT.	Location.	Capacity. (Tons.)	Wagons.
10.....	Engine 17.....	3	1
10.....	Engine 18.....	5	1
12.....	Engine 28.....	20	1
12.....	Engine 30.....	9	1
12.....	Engine 42.....	9	1
12.....	Engine 45.....	9	1
14.....	Engine 16.....	5	1
14.....	Engine 20.....	7	1
14.....	Engine 46.....	4	
15.....	Engine 19.....	8	1
15.....	Engine 48.....	10	1
15.....	Hose 49.....	1	
Total.....	.....	.....	14

APPARATUS IN SERVICE IN DEPARTMENT.

Motor.

27 Motor-drawn engines.
 2 Steam-propelled engines.
 23 Hose cars.
 20 Ladder trucks.
 4 Chemicals.
 3 Water towers.
 1 Rescue car.
 1 Wrecker.
 31 Automobiles.
 7 Delivery trucks.

119

Horse.

18 Engines.
 18 Hose wagons.
 10 Ladder trucks.
 4 Chemicals.

50

APPARATUS IN RESERVE.

6 Engines.
 3 Hose cars.
 5 Ladder trucks
 1 Water tower.
 8 Automobiles.
 3 Old Buick roadsters being
 reconstructed for use as
 fuel and delivery trucks.
 1 Pierce Arrow chassis being
 fitted for rescue car.

146

7 Engines.
 7 Hose wagons.
 5 Ladder trucks.
 4 Chemicals.
 41 Fuel wagons.
 3 Manure wagons

117

MISCELLANEOUS APPARATUS.

- 1 Old Velie roadster (unfit for service) at Department Automobile School, being used for instruction purposes.
- 2 Old Ford delivery trucks (unfit for service) at Department Automobile School, being used for instruction purposes.
- 1 Old Robinson hose car being dismantled and parts being used for replacements on this type apparatus now in service in the department.

MARINE APPARATUS.

- 3 Fireboats.

ENGINES.

NUMBER.	Built by	Put in Service.	Rebuilt by	Date.	Diameter of Cylinder.	Diameter of Pump.	Stroke.	Size.	Weight. (Pounds.)
1.....	Seagrave Company. (Triple combination pump.)	June 20, 1917	.....	1917	5½	*	6½	First.	15,500
2.....	Silsby Manufacturing Company.....	1890	American Fire Engine Company...	1904	8	4½	8	Second.	9,100
3.....	{ Christie Tractor.....	June 16, 1917	.....	.....	9	5½	8	First.	13,140
4.....	{ American Fire Engine Company.....	Jan., 1904	.....	.....	8½	5	8	First.	10,220
5.....	{ International Power Company.....	Jan., 1907	.....	.....	.....	.....	.....	First.	12,000
6.....	{ American-La France Company. (Motor pump.)	1919	.....	1919	7¾	4¾	8	Second.	8,500
7.....	{ Amoskeag Manufacturing Company,	1870	American British Company.....	1914	9	5½	8	First.	9,900
8.....	{ American Fire Engine Company.....	Feb., 1893	American-La France Fire Engine Company.	1907	.....	.....	.....	.....	.....
9.....	{ Christie Tractor.....	July 5, 1917	.....	1917	9	5½	8	First.	12,980
10.....	{ American-La France Fire Engine Company.	May, 1907	.....	.....	8	4¾	8	Second.	9,150
	{ Silsby Manufacturing Company.....	April, 1890	American Fire Engine Company...	1902	.....	.....	.....	.....	14,500
	{ American-La France Tractor.....	Aug. 31, 1914	.....	June, 1914	.....	.....	.....	.....	.....
	{ Silsby Manufacturing Company.....	April, 1886	American Fire Engine Company...	1903	8	4¾	8	Second.	8,900

11.	American-La France Company. (Triple combination pumper.)	July 3, 1914	.....	June, 1914	5½	†	6	First.	11,200
12.	International Power Company.	Dec., 1911	.....	.....	7¾	4¾	8	Second.	9,250
13.	Clapp & Jones Manufacturing Company.	April, 1890	American Fire Engine Company.	1899	8½	5	7	Second.	9,150
14.	Seagrave Company. (Triple combination pumper.)	Aug. 12, 1916	.....	1916	5¾	*	6½	First.	16,420
15.	American-La France Company. (Triple combination.)	1919	.....	1919	.....	.....	.....	Second.	12,000
16.	Amoskeag Manufacturing Company,	July, 1872	American British Company.	1910	7¾	4½	8	Second.	8,740
17.	{ Christie Tractor.	Jan. 7, 1916	{ International Power Company.	1907	7¾	4¾	8	Second.	12,380
18.	{ Amoskeag Manufacturing Company,	Nov., 1890	{ Manchester Locomotive Works.	1905	6½	4	8	Fourth.	8,175
19.	Seagrave Company. (Triple combination pumper.)	July 2, 1917	.....	1917	5¾	*	6½	First.	15,500
20.	Manchester Locomotive Works.	Feb., 1896	.....	1909	6¾	4½	8	Third.	7,950
21.	{ Christie Tractor.	Jan. 12, 1916	{ International Power Company.	1907	7¾	4¾	8	Second.	12,560
22.	{ Amoskeag Manufacturing Company,	Sept., 1870	{ .....	.....	7¾	4¾	8	Second.	12,340
23.	{ Christie Tractor.	Sept. 15, 1917	{ .....	.....	7¾	4¾	8	Second.	9,215
24.	{ Manchester Locomotive Works.	Nov., 1896	{ American Fire Engine Company.	1901	8	4¾	8	Second.	8,415
25.	{ Silsby Manufacturing Company.	April, 1890	{ American Locomotive Works.	1904	7¾	4¾	8	First.	16,000
26.	{ Amoskeag Manufacturing Company,	July, 1867	{ .....	.....	9	5½	8	.....	.....
27.	{ Christie Tractor.	May 15, 1915	{ .....	.....	.....	.....	.....	.....	.....
28.	{ American-La France Fire Engine Company.	Dec., 1910	{ .....	.....	.....	.....	.....	.....	.....

Engines.—Concluded.

NUMBER.	Built by	Put in Service.	Rebuilt by	Date.	Diameter of Cylinder.	Diameter of Pump.	Stroke.	Size.	Weight. (Pounds.)
26.....	{Christie Tractor..... International Power Company.....}	Mar. 15, 1917 Feb., 1909	{..... American Fire Engine Company...}	1917	8½	5½	8	First.	14,240
27.....	Silsby Manufacturing Company.....	1891	American Fire Engine Company...	1892	8	4½	8	Second.	9,118
28.....	{Christie Tractor..... Amoskeag Manufacturing Company,	Jan. 12, 1916 Oct., 1867	{American Locomotive Company...}	1904	7½	4½	8	Second.	12,800
29.....	American British Company.....	Jan., 1911	.....	.....	7½	4½	8	Second.	9,250
30.....	Manchester Locomotive Works.....	Nov., 1890	International Power Company....	1910	6½	4	8	Fourth.	8,375
31.....	G. F. Blake Manufacturing Com- pany.	1914	.....	.....	17	10	11	{ 1 pump, 3,000 gallons.	104 tons.
32.....	International Power Company.....	June, 1907	.....	.....	7½	4½	8	Second.	9,100
33.....	{Christie Tractor..... International Power Company.....}	July 28, 1915 Feb., 1909	{..... .....}	.....	7½	4½	8	Second.	13,150
34.....	Amoskeag Manufacturing Company,	Dec., 1869	American British Company.....	1914	7½	4½	8	Second.	8,300
35.....	Manchester Locomotive Works. (Self propeller.)	Jan., 1898	American British Company.....	1915	9½	5½	8	Double extra first.	18,200
36.....	{Christie Tractor..... International Power Company.....}	Aug. 13, 1917 Nov., 1909	{.....}	1917	8½	5½	8	First.	13,910

FIRE DEPARTMENT.

67

37.....	American-La France Tractor.....	Aug. 10, 1914	.....	.....	.....	.....	.....	.....	14,000
	Manchester Locomotive Works.....	March, 1896	International Power Company.....	1907	6½	4½	8	Third.	8,375
38.....	Manchester Locomotive Works. (Self propeller.)	June, 1897	J. B. Filleul & Son.....	1917	9½	5½	8	Double extra first.	18,170
39.....	Christie Tractor.....	May 10, 1917	American British Company.....	1915	8½	5	8	First.	14,300
40.....	Manchester Locomotive Works.....	June, 1901	.....	.....	.....	.....	.....	.....	.....
	American Locomotive Company.....	Jan., 1906	.....	.....	8½	5	8	First.	10,350
41.....	Robinson Company. (Triple combination pumper.)	Dec. 14, 1914	.....	.....	6½	*	9	First.	15,790
42.....	Manchester Locomotive Works.....	March, 1884	International Power Company.....	1907	6½	4½	8	Third.	8,175
43.....	Christie Tractor.....	Dec. 20, 1915	American Locomotive Company...	1904	7½	4½	8	Second.	12,980
44.....	Amoskeag Manufacturing Company, American Fire Engine Company.....	Nov., 1867 Aug., 1895	.....	.....	{ 12½ H. P. 18 L. P. }	10	11	{ 2 sets of pumps, 6,000 gallons.	178 tons.
45.....	American-La France Company. (Triple combination pumper.)	Aug. 2, 1914	.....	.....	5½	†	6	First.	11,540
46.....	Christie Tractor.....	March, 1915	.....	.....	7½	4½	8	Second.	13,020
47.....	International Power Company.....	Nov., 1909	.....	.....	{ 12 H. P. 22 L. P. }	10	11	{ 2 sets of pumps, 6,000 gallons.	179 tons.
	G. F. Blake Manufacturing Company, Manchester Locomotive Works.....	Aug., 1909 1902	.....	.....	6½	4	8	Fourth.	8,200
48.....	Combination Hose and Chemical.....	July 25, 1918	Seagrave Company.....	1918	.....	.....	.....	.....	12,000
49.....	American-La France Company. (Motor pumper.)	1919	.....	1919	.....	.....	.....	First.	12,000

In Reserve.

NUMBER.	Built by	Put in Service.	Rebuilt by	Date.	Diameter of Cylinder.	Diameter of Pump.	Stroke.	Size.	Weight. (Pounds.)
D.....	American Fire Engine Company.....	June, 1895	American-La France Fire Engine Company.	1907	9	5½	8	First.	9,900
33.....	Manchester Locomotive Works.....	April, 1901	.....	.....	7½	4¾	8	Third.	9,125
11.....	Amoskeag Manufacturing Company,	March, 1879	Manchester Locomotive Works....	1905	6½	4¼	8	Third.	8,300
17.....	Manchester Locomotive Works.....	May, 1886	Manchester Locomotive Works....	1906	6½	4¼	8	Third.	8,490
46.....	(Christie Tractor.....	Oct. 24, 1916	.....	.....	7½	4¾	8	Third.	12,100
	(Manchester Locomotive Company.....	1906	.....	.....					
12.....	Manchester Locomotive Works.....	March, 1882	Manchester Locomotive Works....	1904	6½	4¼	8	Third.	
20.....	Christie Tractor.....	Mar. 27, 1917	.....	.....					12,400
5.....	American Fire Engine Company.....	June, 1907	.....	.....	8	4¾	8	Second.	9,435
50.....	Christie Tractor.....	July, 1903	.....	.....	8½	5	8	First.	14,240
15.....	American Locomotive Works.....	Dec., 1904	J. Fillicul & Son.....	1919	8½	5	8	First.	10,450
	American-La France Company.....	.....	.....	.....	5½	.....	6	750-gallon pumper,	10,500
	American-La France Company.....	.....	.....	.....	5½	.....	6	750-gallon pumper,	10,500
	American-La France Company.....	.....	.....	.....	5½	.....	6	750-gallon pumper,	10,500

LADDER TRUCKS.

NUMBER.	Built by	Put in Service.	Rebuilt by	Feet of Ladders.	Number of Ladders.	Weight. (Pounds.)
1.....	American-La France Company (75-foot).....	1919	Motor driven.....	386	11	19,000
2.....	Abbott-Downing Company.....	1899	.....	439	12	10,800
3.....	Abbott-Downing Company.....	June 2, 1886	Fire Department Repair Shop.....	472	14	9,450
4.....	American-La France Company (85-foot).....	Sept. 28, 1914	Motor driven.....	332	Aerial.	21,040
5.....	Seagrave Company (75-foot).....	June 20, 1917	Motor driven.....	339	Aerial.	25,130
6.....	{ Christie Tractor.....	March 2, 1917	.....	232	17	13,400
	{ C. N. Perkins & Co.....	Aug., 1905	.....			
7.....	Robinson Company.....	Dec. 9, 1914	Motor driven.....	267	12	120,00
8.....	Seagrave Company (85-foot).....	April 22, 1915	Motor driven.....	404	Aerial.	25,130
9.....	Abbott-Downing Company.....	1884	.....	367	15	10,040
10.....	{ Christie Tractor.....	Dec. 24, 1915	.....	307	12	15,010
	{ Fire Department Repair Shop.....	March 18, 1909	.....			
11.....	American-La France Company.....	Jan., 1907	.....	397	14	10,050
12.....	{ Christie Tractor.....	April, 1915	.....	300	Aerial.	17,630
	{ American-La France Company (75-foot).....	April, 1891	.....			
13.....	{ Christie Tractor.....	July 21, 1915	.....	317	Aerial.	16,600
	{ Fire Department Repair Shop (85-foot).....	1907	.....			
14.....	{ Christie Tractor.....	June 5, 1917	.....	316	Aerial.	17,660
	{ American-La France Company (85-foot).....	1906	.....			

Ladder Trucks.—*Concluded.*

NUMBER.	Built by	Put in Service.	Rebuilt by	Feet of Ladders.	Number of Ladders.	Weight. (Pounds.)
15.	{Christie Tractor (85-foot)..... {American-La France Company.....	April 18, 1917 1911	{..... }	335	Aerial.	18,000
16.	{Christie Tractor..... {Fire Department Repair Shop.....	Dec. 21, 1915 Sept., 1888	{..... }	298	15	13,440
17.	{Christie Tractor..... {Seagrave Company (75-foot).....	July 27, 1915 June, 1911	{..... }	281	Aerial.	17,100
18.	{Christie Tractor..... {Seagrave Company (85-foot).....	May 21, 1915 April, 1910	{..... }	362	Aerial.	17,025
19.	Fire Extinguisher Manufacturing Company...	Jan., 1898	.....	172	8	6,937
20.	{Christie Tractor..... {Charles N. Perkins & Co.....	Oct. 27, 1915 Dec. 30, 1902	{..... }	242	8	13,100
21.	American-La France Company.....	Dec. 10, 1913	Motor driven.....	245	10	11,500
22.	{Christie Tractor..... {Charles T. Holloway.....	June 11, 1917 Jan., 1898	{..... }	207	9	13,500
23.	American-La France Company.....	Dec., 1910	.....	197	9	7,300
24.	Charles T. Holloway & Co.....	Oct., 1901	.....	221	7	7,100
25.	{Christie Tractor..... {Charles T. Holloway & Co.....	April 24, 1917 April 25, 1900	{..... }	166	7	13,440
26.	American-La France Company.....	Nov., 1908	.....	262	7	6,435
27.	Charles N. Perkins.....	Nov., 1901	.....	224	9	8,000

28	Seagrave Company.....	Nov.	1910	366	12	5,700
29	American-La France Company.....	Jan.	23, 1913	263	10	8,900
30	American-La France Company.....	March	5, 1913	263	10	8,900
31	American-La France Company.....	Feb.	24, 1913	263	10	8,900

In Reserve.

DESCRIPTION.		Built by		Weight. (Pounds.)	
Relief E.....	Fire Department Repair Shop.....				8,000
Reserve Ladder 11	Hunneman & Co.....		1874		8,000
Relief D.....	Hunneman & Co.....		1873		8,500
Former Ladder 7 (Christie Tractor).....	Charles T. Holloway (Christie Tractor, July, 1915)		1898		12,050
Former Ladder 9 (Christie Tractor).....	Waugh & Co.....		1872		15,200
Ladder 21.....	Charles T. Holloway.....		1898		7,330
Ladder 31.....	American-La France Company, Register No. 200.....				8,900
Number 1.....	Hunneman & Co*.....		1869		10,900

NUMBER.	Built by		Size of Ladder.	Weight. (Pounds.)
238.....	American-La France Company.....		1919	85-foot aerial... 20,000
803.....	American-La France Company.....		1919	85-foot aerial... 20,000

* Rebuilt in Fire Department Repair Shops, 1886-1895.

CHEMICAL ENGINES.

NUMBER.	Built by	Put in Service.	Remarks.	Capacity.	Weight.
				<i>Gallons.</i>	<i>Pounds.</i>
1.....	American-La France Company.....	Dec., 1910	.....	100	5,400
2.....	Babcock Manufacturing Company.....	April 25, 1874	.....	160	5,780
5.....	American-La France Company.....	May 14, 1913	Combination, motor driven.....	35	7,750
7.....	Babcock Manufacturing Company.....	Sept. 27, 1876	Altered by Hinman, 1886.....	100	4,880
10.....	Seagrave Company.....	Feb. 10, 1917	Combination, motor driven.....	235	11,360
11.....	American-La France Company.....	April 18, 1913	Combination, motor driven.....	40	8,799
13.....	Knox Automobile Company.....	Dec. 3, 1914	Combination, motor driven.....	35	9,100
14.....	Babcock Manufacturing Company.....	1889	.....	100	4,640

In Reserve.

NUMBER.	Built by	Put in Service.	Capacity.	Weight.
			<i>Gallons.</i>	<i>Pounds.</i>
Reserve 1.....	Babcock Manufacturing Company.....	1890	100	4,580
Reserve 12.....	Babcock Manufacturing Company (altered by Hinman).....	Oct., 1890	100	4,500
Reserve 14.....	Babcock Manufacturing Company (altered by Hinman).....	1881	100	3,900
Reserve 10.....	Babcock Manufacturing Company.....	Sept. 13, 1889	100	4,700

WATER TOWERS.

NUMBER.	Built by	Put in Service.	Weight. (Pounds.)
1.....	American-La France Company.....	Oct. 30, 1912	14,600
2.....	Kansas City Fire Department Supply Company.....	May 17, 1890	10,000
3.....	International Company.....	Nov. 2, 1903	12,050
4 (Reserve).....	Kansas City Fire Department Supply Company.....	Dec. 18, 1893	10,000

Towers are equipped with American-British Company tractors.

TOOLS AND MACHINERY IN REPAIR SHOP.

Blacksmith Shop.	Boiler Room.	Hose and Harness Shop.	Engine Room.	Wheelwright and Machine Shop.
5 forges. 1 power hammer. 1 gas tire heater. 1 tire upsetter. 1 punch and shears. 1 lever shears. 1 tire roller. 2 rubber tire setters. 1 bolt cutter. 1 fan blower.	3 vertical tubular boilers, each 75 horse power. 2 Blake boiler feed pumps.	1 Buckley electric hose test- ing and expanding engine. 2 electrically-driven sewing machines. Numerous tools and appli- cances for repairing hose and harnesses.	1 25 horse power steam engine cylinder, 9 by 31. 1 Knowles triplex pump for hose testing. 1 15 horse power motor. 2 dynamos and engines which supply current to fire alarm central station.	1 each engine lathes, with foot beds, 28 by 12; 16 by 12; 16 by 9; 14 by 8 and 14 by 6. 1 16 by 10 speed lathe. 1 16 by 10 wood lathe. 1 26 by 26 planer, 8-foot bed. 1 planer, 16 by 29, shaper. 1 radial drill. 2 upright drills. 1 wall drill. 1 circular saw. 1 band saw. 1 boring and mortising machine. 2 buzz planers. 1 grindstone. Numerous small tools.

Also tools for the repair of automobile apparatus.

EXPENDITURES FOR THE YEAR.

Personal service:

Permanent employees	\$1,992,837 23	
Temporary employees	98 00	
Unassigned	4,011 25	
		\$1,996,946 48

Service Other than Personal:

Printing and binding	\$156 90	
Postage	385 11	
Advertising and posting	62 95	
Transportation of persons	1,660 09	
Cartage and freight	597 02	
Hire of teams	186 60	
Light and power	12,848 32	
Rent, taxes and water	3,061 88	
Communication	2,198 36	
Motor vehicle repairs and care	8,277 33	
Motorless vehicle repairs	3,346 29	
Cleaning	8,599 53	
Examinations	668 00	
Testing materials and supplies	140 00	
Expert and architect	470 00	
Fees, etc.	1,303 00	
Boiler inspection	219 00	
Photographic and blueprinting	164 69	
General plant	43,471 40	
Horseshoeing and clipping	15,095 75	
		102,912 22

Equipment:

Cable, wire, etc.	\$15,572 61	
Electrical	2,698 59	
Motor vehicles	250,560 95	
Stable	2,854 50	
Furniture and fittings	4,335 88	
Office	185 14	
Tools and instruments	24,193 54	
Live stock	3,575 00	
Wearing apparel	1,396 67	
General plant	458 08	
		305,830 96

Supplies:

Office	\$4,323 37	
Food and ice.	942 54	
Fuel	77,599 66	
Forage and animal	41,891 85	
Medical, surgical, laboratory	199 97	
Veterinary	236 93	
Laundry, cleaning, toilet	3,667 34	

<i>Carried forward</i>	\$128,861 66	\$2,405,689 66
----------------------------------	--------------	----------------

<i>Brought forward</i>		\$128,861 66	\$2,405,689 66
Motor vehicle		19,121 87	
Chemicals and disinfectants		3,485 29	
General plant		4,517 31	
Cloth		2,421 80	
			158,407 93
Materials:			
Building		\$16,780 05	
Electrical		3,568 46	
General plant		33,860 15	
			54,208 66
Special items:			
Pensions and annuities			198,724 41
Workingmen's compensation			530 00
			\$2,817,560 66

Wire Division (from June 10, 1919):

Personal Service:

Permanent employees . . . \$42,924 04

Service Other than Personal:

Printing and binding . \$13 13

Postage . . . 175 00

Transportation of persons . . . 930 19

Premium on surety bond . . . 6 00

Motor vehicle . . . 290 55

Fees, etc. . . . 10 00

Photographic and blueprinting . . . 4 25

General plant . . . 1 65

Horseshoeing and clipping . . . 7 50

1,438 27

Equipment:

Electrical . . . \$15 81

Motor vehicle . . . 931 45

Stable . . . 10 00

Tools and instruments . . . 14 55

971 81

Supplies:

Office . . . \$669 45

Motor vehicles . . . 136 34

805 79

Materials:

Electrical . . . \$5 40

General plant . . . 34 10

39 50

Carried forward . . . \$46,179 41 \$2,817,560 66

<i>Brought forward</i>	\$46,179 41	\$2,817,560 66
Special items:		
Pensions and annuities	300 00	
		46,479 41
		<u>\$2,864,040 07</u>

FIRE QUARTERS, READVILLE (HYDE PARK).

Continuation of payments:

Contractor, M. S. Kelliher	\$4,477 90
Architect, Joseph McGinniss	355 41
Expert services	45 00
	<u>\$4,878 31</u>

RECAPITULATION.

Fire Department	\$2,864,040 07
Fire Quarters, Readville	4,878 31
	<u>\$2,868,918 38</u>

INCOME.

Permits for fires in open spaces, fireworks, blasting, transporta- tion and storage of explosives	\$7,252 75	
Sale of uniform cloth	2,309 25	
Services of Fireboat No. 47, United States Government	1,650 40	
Sale of badges	1,072 00	
Sale of old material	841 03	
Damage to apparatus	536 75	
Sale of horses	465 00	
Damage to fire alarm posts and boxes	220 57	
Refund of salary	130 94	
Sale of manure	94 00	
Refund of amount drawn to pay traveling expenses	10 00	
Refund of overpayment	7 00	
Removal of dead horse	5 00	
		\$14,584 69
Wire Division (from June 10, 1919):		
Fees	\$21,819 95	
Damage to automobile	15 00	
Sale of horse and wagons	125 00	
		21,959 95
		<u>\$36,544 64</u>

ALARMS, FIRE LOSSES AND INSURANCE.

MONTHS.	ALARMS RECEIVED.						LOSS.		INSURANCE.		ALARMS.				Not in Building.	Out of City.	Damage None.	Damage Slight.	Damage Considerable.	Totally Destroyed.				
	FROM WHOM.										BELL.	STILL.	Needless.											
	Members.	Police.	Citizens.	Telephone.	Automatic.	Unknown.	Total.	Buildings.	Contents.															
										Fire.				False.							Needless.	Fire.	Needless.	
January.....	4	9	276	110	14	16	429	\$185,500	\$346,536	\$2,825,614	\$1,118,246	157	16	17	190	37	231	2	113	1	107	123	3	....
February.....	5	16	341	244	12	23	641	123,523	173,659	2,206,783	1,871,100	264	23	5	298	41	252	7	296	7	100	151	7	1
March.....	2	9	232	144	6	17	410	53,413	26,944	2,386,483	610,700	164	20	17	176	29	212	9	118	1	84	137	....	....
April.....	3	13	254	135	8	37	450	43,348	53,876	3,116,200	1,118,550	188	34	13	180	29	211	4	146	7	81	132	2	....
May.....	6	10	223	98	12	13	362	78,859	176,514	4,158,880	2,677,750	163	14	14	136	29	194	8	95	2	76	117	9	....
June.....	5	17	289	147	13	34	505	48,560	25,145	2,486,650	477,494	174	34	20	219	50	221	4	164	4	99	123	3	....
July.....	6	19	323	158	18	38	562	62,248	76,362	2,586,552	547,885	226	38	13	232	38	240	13	201	4	121	129	3	....
August.....	8	9	189	74	19	21	320	24,042	29,663	1,826,144	409,400	136	20	10	114	25	177	1	70	2	90	86	2	....
September....	2	6	218	59	11	108	404	38,239	43,028	1,625,550	243,350	143	108	10	98	36	165	2	70	4	73	89	4	1
October.....	4	2	242	68	15	38	369	148,172	180,493	2,260,065	1,787,400	171	38	11	112	26	216	3	63	1	88	124	7	....
November....	14	3	309	95	13	26	460	71,907	95,838	4,297,288	1,072,650	193	27	14	193	28	249	8	129	....	104	148	4	1
December.....	7	9	329	136	19	11	511	155,503	173,906	1,767,811	833,725	214	10	14	212	49	325	9	90	2	156	172	6	....
Totals....	66	122	3,225	1,468	160	382	5,423	\$1,033,314	\$1,401,976	\$31,544,020	\$12,768,256	2,193	382	158	2,160	417	2,693	70	1,555	35	1,179	1,531	50	3

CAUSES OF FIRES AND ALARMS FROM JANUARY 1, 1919,
TO JANUARY 1, 1920.

Alarms, false, needless, bell and still	957	Grease in ventilator	22
Alarms, out of city	35	Hot ashes in wooden receptacle	71
Automatic alarms, false and accidental	113	Incendiary and supposed	18
Automobiles	202	Lamp upsetting, explosion	0
Brush, rubbish, etc.	1,064	Miscellaneous	200
Careless use lamp, candle	90	Oil stove, careless use and explosion	64
Careless use matches and set by rats	441	Overheated furnace, stove, boiler	116
Careless use pipe, cigar and cigarettes	344	Set by boys	142
Chimneys, soot burning	169	Sparks from chimneys, stove, ...	113
Clothes near stove	26	Sparks from locomotive engine	36
Defective chimney, stove-pipe, boiler	51	Spontaneous combustion	99
Electric wires, motors	152	Thawing	41
Fireworks and firecrackers	43	Unknown	709
Gas jet and gas stove	85		
Gasolene, naphtha, benzine	20	Total	5,423

1919.	FIRE EXTINGUISHED BY						
	Extinguishers.	Buckets of Water.	Chemical Engines.	Hydrant Streams.	Steamers.	Miscellaneous.	Citizens.
January	84	32	66	17	34	70	43
February	85	34	95	57	48	194	42
March	63	22	77	18	35	85	39
April	64	40	72	29	42	79	35
May	68	30	71	25	31	48	24
June	78	37	80	75	31	43	45
July	94	63	85	88	46	33	45
August	58	30	58	24	23	31	24
September	47	34	56	17	26	18	39
October	71	33	61	25	37	23	32
November	79	38	80	38	43	72	36
December	118	37	78	28	61	68	34
Totals	909	430	879	441	457	764	438

FIRES WHERE LOSS EXCEEDED \$15,000.

DATE.	Location and Owner.	Loss.
1919.		
Jan. 12.	38-42 Damrell street, S. A. Woods Machine Company.....	\$219,041
Jan. 21.	166-174 Summer street, Hub Shoe Company <i>et al.</i>	188,994
Jan. 24.	19-23 Columbia street, C. W. Stores Company <i>et al.</i>	31,947
Feb. 3.	81-85 Court street, Crawford House <i>et al.</i>	28,139
Feb. 4.	176-178 Huntington avenue, J. Malkin <i>et al.</i>	40,244
Feb. 14.	42-50 Chardon street, Bicknell & Fuller <i>et al.</i>	21,206
Feb. 21.	99-101 Bedford street, Kingston Bias Bindery Company <i>et al.</i> ,	20,552
Feb. 22.	80 Kingston street, Blodgett, Ordway & Webber <i>et al.</i>	45,676
Feb. 22.	15-23 Exchange street, M. F. Cottrell Company <i>et al.</i>	17,317
April 2.	113-115 Fulton street, B. Rutstein & Sons Company <i>et al.</i>	18,380
May 1.	121 Beverly street, Richards & Co. <i>et al.</i>	19,987
May 13.	55 Terminal street, People's National Bank of Roxbury <i>et al.</i> ...	55,985
May 20.	127 St. Botolph street, A. Shedlovsky <i>et al.</i>	15,129
May 24.	299-303 Congress street, Handelsmaatschappy "Transmarina," Inc., <i>et al.</i>	18,044
May 30.	12-18 Ewer street, A. W. Wright <i>et al.</i>	20,700
July 2.	60 Fulton street, Arax Grocery Company <i>et al.</i>	22,733
Sept. 1.	540 Sumner street, Aeolian Macaroni Company <i>et al.</i>	26,269
Oct. 2.	110-120 Mt. Vernon street, Underwood Machine Company..	50,043
Oct. 11.	Off Erickson street, George Lawley & Son Corporation.	169,500
Oct. 28.	531-537 Hanover street, Mataino & Petringa <i>et al.</i>	18,181
Oct. 31.	80-86 Granite street, Gillette Safety Razor Company.....	42,444
Nov. 1.	11 Lehigh street, Boston Paper Board Company, Inc.....	41,185
Nov. 9.	41 Pearl street, Nathan Sawyer & Son, Inc., <i>et al.</i>	21,840
Dec. 3.	Mystic Wharf, Export Lumber Company <i>et al.</i>	35,851
Dec. 18.	186 Commonwealth avenue, "Abbotsford," Sidney Wade Company <i>et al.</i>	67,259
Dec. 23.	142 Kingston street, Manhattan Novelty Company <i>et al.</i>	61,354

STATISTICS.

Population, January 1, 1920	808,310
Area square miles	47.81
Number brick, etc., buildings	31,603
Number of wooden buildings	75,527
Fires in brick and stone buildings	1,549
Fires in wooden buildings	1,214
Out of city	35
Not in buildings, false and needless	2,625

Total alarms	<u>5,423</u>
------------------------	--------------

FIRE LOSS FOR THE YEAR ENDING DECEMBER 31, 1919.

Buildings, loss insured	\$994,478
Contents, loss insured	1,236,142

\$2,230,620

Buildings, loss not insured	\$38,835
Contents, loss not insured	165,829

204,664

Total loss building and contents	<u>\$2,435,284</u>
--	--------------------

Marine loss	<u>\$142,300</u>
-----------------------	------------------

YEARLY LOSS FOR THE PAST FIFTEEN YEARS.

Year ending February 1, 1906	.	.	.	.	\$2,130,146
" " 1, 1907	.	.	.	.	1,130,334
" " 1, 1908	.	.	.	.	2,268,074
" " 1, 1909	.	.	.	.	3,610,000
" " 1, 1910	.	.	.	.	1,680,245
" " 1, 1911 (11 months)	.	.	.	.	3,159,989
" January 1, 1912	.	.	.	.	2,232,267
" " 1, 1913	.	.	.	.	2,531,017
" " 1, 1914	.	.	.	.	* 3,138,373
" " 1, 1915	.	.	.	.	3,013,269
" " 1, 1916	.	.	.	.	3,004,600
" " 1, 1917	.	.	.	.	† 2,372,489
" " 1, 1918	.	.	.	.	† 3,981,227
" " 1, 1919	.	.	.	.	2,822,109
" " 1, 1920	.	.	.	.	2,577,584

* Does not include marine loss of \$1,116,475, steamship "Templemore."

† Does not include marine loss of \$101,312, steamship "City of Naples" *et al.*

‡ Does not include marine loss of \$75,660.

NOTE.—January loss, 1911, amounting to \$165,001, deducted from previous year and included in calendar year January 1, 1911, to January 1, 1912.

ALARMS FOR THE PAST TEN YEARS.*

YEAR.	Bell.	Still and Automatic.	Totals.
1919.....	2,733	2,690	5,423
1918.....	2,413	2,649	5,062
1917.....	2,252	2,526	4,778
1916.....	2,350	2,128	4,531
1915.....	2,847	2,590	5,437
1914.....	2,945	2,589	5,534
1913.....	2,594	2,322	4,916
1912.....	2,812	2,432	5,244
1911.....	2,291	2,142	4,433
1910 (11 months)†.....	1,864	1,801	3,665

* Each fire is treated as having only one alarm.

† 202 bell and 196 still alarms deducted from year 1910-11 and included in calendar year January 1, 1911, to January 1, 1912.

ROLL OF MERIT, BOSTON FIRE DEPARTMENT.

Joseph P. Hanton, Captain, Engine Company 3.
 Thomas J. Muldoon, Captain, Engine Company 20.
 Thomas H. Downey, Captain, Engine Company 22.
 Michael J. Teehan, Captain Engine Company 24.
 Denis Driscoll, Captain, Engine Company 37.
 James F. McMahon, Captain, Ladder Company 1.
 Frederick F. Leary, Captain, Ladder Company 3.
 Edward McDonough, Lieutenant, Engine Company 8.
 Timothy J. Heffron, Lieutenant, Ladder Company 9.
 Michael J. Dacey, Lieutenant, Ladder Company 20.
 John J. Kennedy, Ladderman, Ladder Company 13.
 Martin A. Kenealy, Captain, retired.
 James E. Downey, Hoseman, retired.

CHANGES FROM FEBRUARY 1, 1919, TO FEBRUARY 1, 1920.

Number of men appointed to fire force	43
Number of men reappointed to fire force	13
All others	8
Resigned	16
Discharged	12
Pensioned	24
Deaths	7
Pensioners died	13

MEMBERS PENSIONED FROM FEBRUARY 1, 1919, TO
FEBRUARY 1, 1920.

John A. Noonan.	Jeremiah F. Gillen.
John Grady.	John H. Cassidy.
Thomas Wyllie.	John P. Olsen.
John McCann.	John J. Ryan.
Stephen J. Ryder.	Patrick F. Goggin.
Peter F. McDonough.	Frank J. Lynch.
William Chittick.	William J. Gaffey.
George N. F. Getchell.	John H. Callahan.
Hadwin Sawyer.	David J. Ryan, Jr.
George A. Newhall.	Joseph T. Smith.
John K. Wheelock.	Michael J. Lawler.
Frank J. Linloff.	Charles Windhorn.

DEATH OF MEMBERS FROM FEBRUARY 1, 1919,
TO FEBRUARY 1, 1920.

Warren A. Chase, Jr.	David W. Towle.
Thomas J. Stevens.	James F. O'Hare.
Henry H. F. Keenan.	John H. Belyea.
Michael J. Sullivan.	

DEATH OF PENSIONERS FROM FEBRUARY 1, 1919,
TO FEBRUARY 1, 1920.

Richard W. Brown.
Edward A. Shea.
William E. Staples.
Michael C. Leonard.
Frank Patrick.
Albert Laskey.
Francis McArdle.

Alfred H. Perry.
Warren H. Brown.
Isaac B. Noble.
John W. Smith.
George S. Smith.
John J. Flanagan.

BOSTON FIREMEN'S RELIEF FUND.

BOSTON, October 3, 1919.

To the Members of the Body Corporate of the Boston Firemen's Relief Fund:

DEAR SIRS,— We hereby certify that we have audited the accounts of the treasurer of the Boston Firemen's Relief Fund to the close of business August 31, 1919, and find them correct.

The deposits in the bank and the checks drawn thereon have been compared with the accounts received from the bank, and have been found to agree therewith, and are all properly entered on the books of the treasurer.

Income from all sources is accounted for, except dividend of American Telephone and Telegraph Company stock in January, 1919, amounting to \$18,* which probably went astray in the mail and for which a duplicate check has been requested, also Edison Electric Illuminating Company, \$3 due in August, 1919, which was received, but not deposited in time to be included in the August account. Payments are supported by proper vouchers, and the balance on hand at the close of business August 31, 1919, is correct.

We examined the securities belonging to the fund, consisting of \$174,000 City of Boston registered bonds; \$8,000 Chicago, Burlington and Quincy coupon bonds; \$45,000 Liberty Loans; \$7,000 city of San Francisco Hospital, and certificates of stocks received from the estates of Anne Sargent and Franklin P. Hyde, also \$1,000 War savings stamps.

We have seen a bond issued by the American Surety Company of New York to Henry J. McNealy, treasurer, for \$25,000.

A summary of receipts and disbursements for the year ending August 31, 1919, is appended hereto.

Respectfully submitted,

AMOS D. ALBEE SON & Co.,
Certified Public Accountants.

* Since the above was written, a check for \$18 has been received, and seen by us.

RECEIPTS AND DISBURSEMENTS FROM SEPTEMBER 1, 1918, TO
AUGUST 31, 1919.

Receipts.

Balance September 1, 1918	\$7,792 39
Amount received from ball fund	17,187 04
Interest on bonds	7,890 00
Interest on Liberty Loan bonds	761 48
Dividends on stocks	247 00
Interest on deposits	237 41
Donations	25 00
City of Boston bonds matured	31,000 00
American Trust Company loan	5,000 00
Discount on Liberty Loan Bonds*	470 93
	<u>\$70,611 25</u>

Disbursements.

Death and sick benefits, gratuities, medical attendance and medicine, \$34,082 31	
Less refunds	64 50
	\$34,017 81
Salaries	350 00
Treasurer's bond	62 50
Box at International Trust Company vaults	10 00
Free bed, Massachusetts General Hospital	200 00
Auditing twelve months	125 00
Expenses, stationery, postage, etc.	254 90
Paid American Trust Company loan	5,000 00
Interest on note	37 50
Revenue stamp on note	1 00
Herbert Parker, Averill suit	695 00
United States Liberty Bonds.	25,000 00
	\$65,753 71
Cash balance:	
Deposited in American Trust Company	4,857 54
	<u>\$70,611 25</u>

